

AGRICULTURAL OUTLOOK



June 1986

Economic Research Service
United States Department of Agriculture

*Have Farmland Values
Bottomed Out?*

AGRICULTURAL OUTLOOK

June 1986/AO-120



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Contents of this report have been approved by the World Agricultural Outlook Board, and the summary was released May 16, 1986. Materials may be reprinted without permission. *Agricultural Outlook* is published monthly, except for the January/February combined issue. Price and quantity forecasts for crops are based on the May 9 World Agriculture Supply and Demand Estimates.

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The next issue of *Agricultural Outlook* (AO-121) is scheduled for mailing on June 30, 1986. If you do not receive AO-121 by July 14, call the Managing Editor (be sure to have your mailing label handy). The full text and tables of AO-121 will also be available electronically. For more information, write EMS/USDA, 1301 New York Avenue, N.W., Room 228, Washington, D.C. 20005-4789, or call (202) 786-1494.

In Brief. . . News of Economic Growth, Farm Balance Sheet, Fertilization Rates

Farmers' cash expenses in 1986 are forecast to drop \$5 to \$6 billion from 1985, and close to \$11 billion from 1984. This will be the first time since the early 1930's that cash expenses have declined for 2 consecutive years. This year's drop, combined with larger Government payments, will help support 1986 net cash income at a forecast \$42 to \$46 billion, about matching the record high estimated for 1985. However, net farm income is expected to edge lower this year.

U.S. farmland values fell 12 percent in 1985, continuing the trend that began in 1981. The large fall in values, compared with cash rents, has put rent-to-value ratios closer to their pre-1974 levels. This suggests that land values may be stabilizing. Also, declines in interest rates are making it easier to purchase land.

On the other hand, cash land rents may continue to decline as multiyear rent contracts expire and are renegotiated at lower levels to reflect expectations of lower returns. Land values could also be pressured downward if financial institutions market foreclosed land too rapidly.

The 50- to 60-percent cumulative decline in land prices in several major Corn Belt States, combined with lower interest rates, could spell substantial savings for those purchasing farm real estate. For example, consider annual payments for 160 acres of Illinois farmland bought at 12 percent interest at a 1981 statewide average price of \$2,188 per acre. The payments would be \$46,869 (20-year amortization with equal payments). Based on a 1981/82 national average farm price for corn of \$2.50 per bushel, a yield of 117 bushels per acre would be needed just to meet those land payments.

However, the decline in Illinois land prices to \$1,143 per acre in early 1986, combined with 10-percent financing, would translate into an annual payment of \$21,481 for those buying the same land today. At the 1986/87 corn loan rate of \$1.92 a bushel, only 70 bushels per acre would be needed to meet the lower requirements.



Since 1986 planted acreage will be down about 5 percent, mainly because of greater participation in Government programs, total fertilizer use could drop about 4 percent from last year's 22 million tons. But, fertilizer application per acre could rise slightly because farmers typically set aside their lower yielding, less intensively fertilized acres.

Provisions of the 1985 farm bill that mandate lower U.S. loan rates are now being implemented. The marketing loan program for rice became effective April 15 and the lower loan rates for 1986/87 crops of wheat, feed grains, and cotton will become effective between June 1 and September 1. U.S. rice export sales are already responding to lower price supports; they rose from a weekly average of 10,000 metric tons for the 4 weeks ending April 10 to 55,000 tons during the 4 weeks following April 10. During 1986/87, rice exports are forecast to jump nearly 40 percent, to 75 million cwt.

Wheat, feed grain, and cotton exports are also expected to rise sharply in 1986/87. Nevertheless, ending stocks of feed grains are likely to continue climbing. Ending stocks of wheat, cot-

ton, rice, and soybeans, although falling, will remain large.

With more dairy cows in the slaughter mix and relatively high steer and heifer slaughter weights, second-quarter 1986 beef production will likely be near a year ago. Continued high beef production and increased poultry output may pressure Choice steer prices this spring. Omaha Choice steer prices will probably average only \$55 to \$58 per cwt, compared with \$57.20 for the first quarter and \$61.40 last fall.

Hog prices in April averaged \$40 per cwt at the 7 markets, slightly below the estimated average farrow-to-finish cost of production. Preliminary data indicate that hog slaughter in April was about the same as a year earlier, despite the 4-percent decline in the March 1 inventory of market hogs weighing 120-179 pounds.

The current economic expansion is in its 43rd month, making it the second longest peacetime expansion in U.S. history. Growth has occurred in fits and starts, however, and been uneven across sectors. For example, real GNP grew only 2.2 percent in 1985, in contrast to the 6.6-percent rate in 1984. Employment in services has grown 18 percent since the last business cycle trough (November 1982), compared with only 7-percent growth in manufacturing. Partly because this expansion is so uneven, though, there is considerable room left for further improvement in some sectors, increasing the likelihood that growth will continue.

The recent decline in the U.S. dollar, particularly the spectacular fall against the Japanese yen, is raising expectations for improvement in U.S. agricultural exports. However, the yen-dollar exchange rate is an incomplete indicator of how the dollar has moved against all currencies important to U.S. agricultural trade. An exchange-rate index weighted by U.S. farm exports shows that the dollar remains strong against many currencies of agricultural importance. This potent dollar continues to hurt U.S. sales.



Agricultural Economy

Provisions of the 1985 farm bill that mandate lower U.S. loan rates are now being implemented. The marketing loan program for rice became effective April 15, and the 1986/87 crop years for wheat, feed grains, cotton, and soybeans begin between June 1 and September 1. These new programs will cause major changes in the world's agricultural economies—with different groups being affected in different ways.

Corn and hog producers are making changes because of falling corn prices. Like most grain and cotton farmers, they enrolled in Government programs this year, requiring them to put 20 percent of their acreage into conserving uses. Since about 83 percent of all U.S. corn farmland is enrolled, 1986 corn plantings could fall from 83 to 78 million acres.

Cash Income Could Remain Up in 1986
Declines in fuel and agrichemical costs may reduce total operating expenses on corn farms, excluding real estate interest, by about 5 percent this year. Lower interest rates could further reduce production costs.

Direct Government support payments to corn farmers will rise from 48 cents a bushel in 1985 to a possible \$1.11 before adjustments for Gramm-Rudman-Hollings. Combined with lower production costs, the higher Government benefits may offset lower corn

prices and the increase in the acreage reduction requirement from 10 percent last year to 20 percent. As a result, net cash income for corn farmers could be about the same this year as last.

Farmers strive to optimize crop yields, and U.S. corn yields climbed to a record 118 bushels an acre in 1985. Rice, cotton, and soybean yields also set records. However, yields may decline in 1986, partly because 1985's superlative weather may not happen again. Also, as the price of corn falls, the incentive to apply fertilizer, pesticides, water, and other variable inputs may decline. However, because prices have fallen for inputs, particularly for fertilizer and fuel, input use will not shrink dramatically.

Lower crop prices affect a corn/hog farmer by boosting returns from producing hogs. Feed costs account for about 60 percent of total cash costs in producing hogs, and the drop in feed costs will help net returns in 1986.

Most hog farmers, however, are still not ready to expand their operations. Large total meat supplies are holding down hog prices and making producers cautious.

The Goal: Boosting Exports

One of the main purposes of lower loan rates in the 1985 farm bill is to boost U.S. exports. Despite Government programs that idled 74 million acres of wheat land during 1982/83-1985/86, U.S. wheat ending stocks for 1985/86 rose to 1.9 billion bushels, equaling about 95 percent of a year's consumption.

The rise in ending stocks occurred largely because U.S. exports fell from 1.8 billion bushels in 1981/82 to 0.9 billion in 1985/86. The excess of supply over demand pushed U.S. prices down to the loan rate, meaning that an increasing proportion of grain and cotton farmers' net income is coming from Government deficiency payments. However, wheat exports are expected to rebound to 1.1 billion bushels in 1986/87 as U.S. wheat prices become more competitive, and further growth could occur in later years.

People other than farmers are also being affected by the new farm bill. For instance, managers of textile mills will

Crop Futures Prices

Crop 1/	Futures prices 2/	
	Nearby contract	Deferred contract
Wheat (\$/bu.)	3.38 (May)	2.62 (July)
Cotton (¢/lb.)	67.08 (July)	37.15 (Oct.)
Corn (\$/bu.)	2.58 (May)	1.99 (Dec.)
Soybeans (\$/bu.)	5.35 (May)	5.18 (Nov.)

1/ Crop years begin June 1 for wheat, August 1 for cotton, and September 1 for corn and soybeans. 2/ As of May 20.

U.S. Crop Exports

	1985/86 estimated	1986/87 forecast	Change Percent
Wheat (mil. bu.)	900	1,100	22
Rice (mil. cwt.)	55.0	75.0	36
Feed grains (mil.)	41.8	48.9	17
Soybeans (mil. bu.)	780	775	-1
Cotton (mil. bales)	2.0	6.0	200
Tobacco (mil. lbs.)	660	680	3

appreciate the decline in the cost of fiber. Cotton's share of fiber use rose substantially in 1985, and lower loan rates for 1986-crop cotton will probably encourage additional gains in market share. The lower cotton prices will also enable mills to charge less for cotton products, benefiting U.S. consumers and possibly reducing the growth in textile imports.

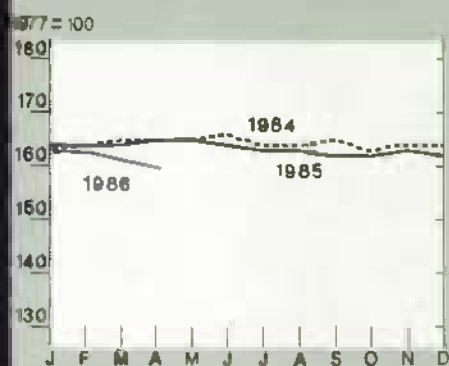
Lower World Prices Likely

The U.S. farm programs are affecting foreign producers as well. The new U.S. rice program will result in lower world market prices. Under the 1985 Act, U.S. rice farmers will receive an average price of \$7.20 per cwt plus a deficiency payment of about \$4.70, for a total return of about \$11.90 per cwt before Gramm-Rudman-Hollings reductions. Meanwhile, the market price for U.S. rice will fall toward the world level, currently about \$3.60 a cwt, as the Government operates a marketing loan program.

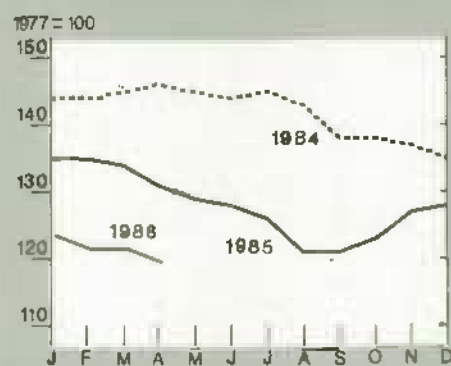
As a result, U.S. rice exports are expected to jump about 35 percent from 1985/86 to 1986/87, and competitors' rice exports may fall as a result. The Government of Thailand tried to implement a program in early 1986 to support Thai farm prices. However, the program proved unworkable because rice traders were anticipating more competitive U.S. prices. [Terry Townsend (202) 786-3313]

Prime Indicators of the U.S. Agricultural Economy

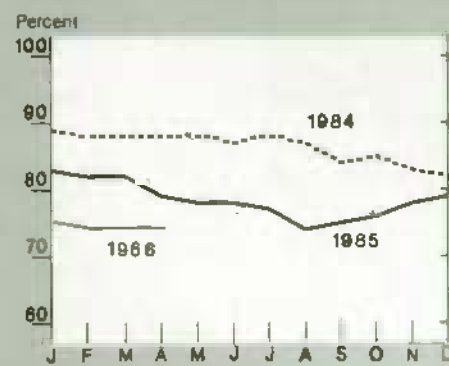
Index of prices paid by farmers¹



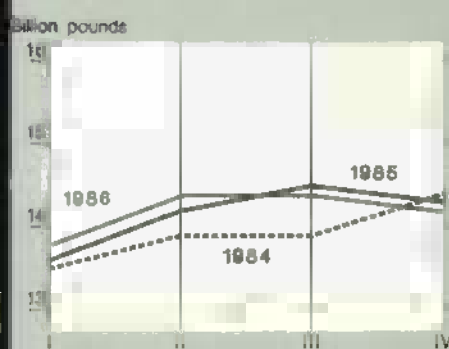
Index of prices received by farmers²



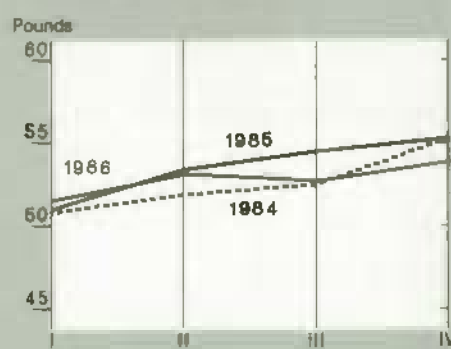
Ratio of prices received to prices paid



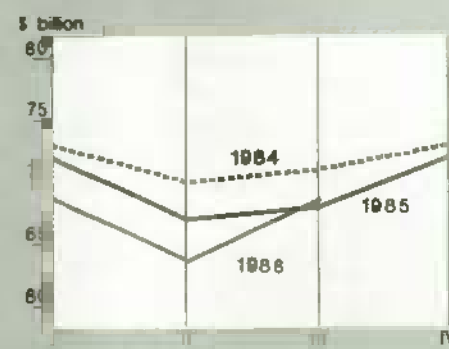
Red meat & poultry production



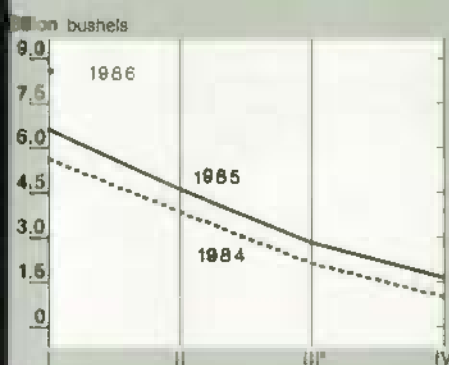
Red meat & poultry consumption, per capita³



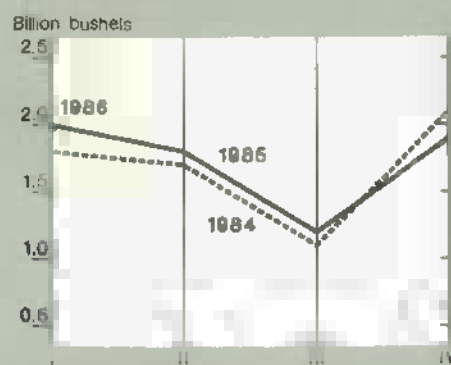
Cash receipts from livestock & products⁴



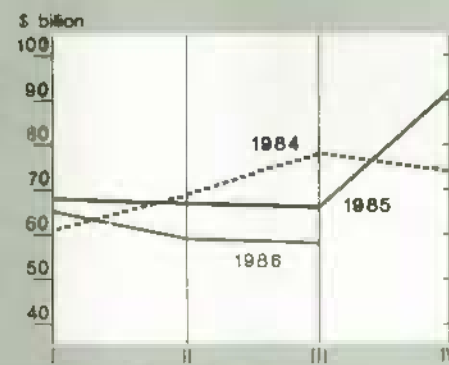
Corn beginning stocks⁵



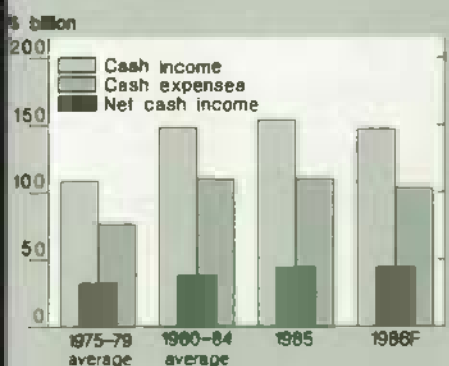
Corn disappearance⁵



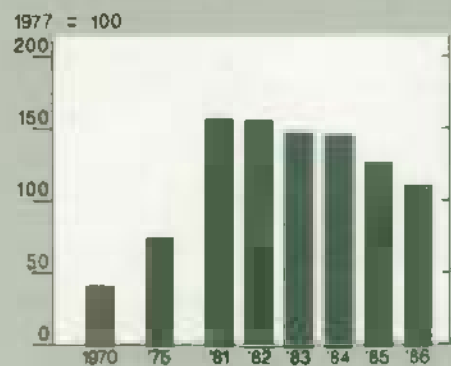
Cash receipts from crops⁴



Farm cash income



Farm real estate values



Farm value/retail food costs



¹For commodities and services, interest, taxes, and wages
I=Jan-Mar; II=Apr-May; III=June-Sept.; IV=Oct-Dec.

²For all farm products

³Retail weight.

⁴Seasonally adjusted annual rate.

F=forecast

LIVESTOCK HIGHLIGHTS

• Cattle

With more dairy cows in the slaughter mix and relatively high steer and heifer slaughter weights, second-quarter 1986 beef production will likely be near a year ago (see tables 10 and 16 in back of issue). Continued high beef production and increased poultry output may pressure Choice steer prices this spring. Omaha Choice steer prices will probably average only \$55 to \$58 per cwt, compared with \$57.20 for the first quarter and \$61.40 last fall.

First-quarter weights remained high; cattle feeders continued to delay marketings in anticipation of higher steer prices, as they did throughout 1985. Much of the increase in cattle weights this spring reflects continued heavy heifers. Heifer weights for the first quarter averaged 642 pounds, compared with 628 pounds a year earlier. Steer weights averaged 722 pounds, 11 pounds above a year before.

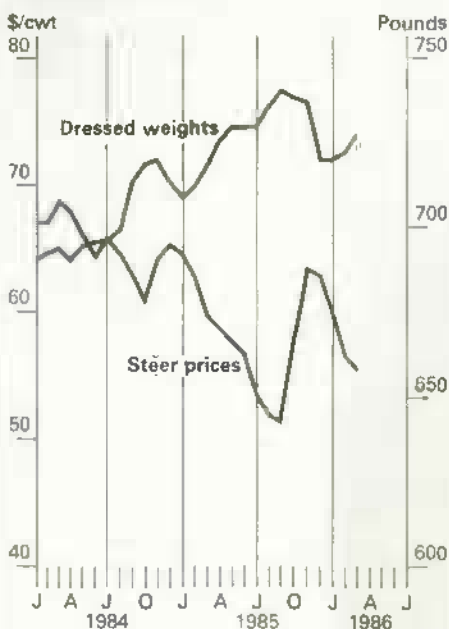
Combined weights of federally inspected dressed cattle averaged 657 pounds for the first quarter, well above 1985's 644-pound first-quarter average. This additional weight added 1 percent to total beef production during the winter.

Cattle on feed on April 1 in the 13 States surveyed were 8 percent fewer than a year earlier. The lower inventory and its weight breakdown suggest that second-quarter fed cattle marketings may decline 3 to 5 percent from a year earlier. This follows a 3-percent drop from a year earlier during the first quarter.

Net placements during the first quarter, however, were about even with a year earlier. Many of these cattle were placed at heavy weights and marketed during the beginning of the second quarter. The number of heavy heifers on feed on April 1 was up 7 percent from a year earlier. Cattle slaughter was relatively high in April, and movement out of the Texas-Oklahoma Panhandle was large, so feedlots may be more current in their marketings.

Yearling feeder steer prices at Kansas City averaged \$62.60 during the first quarter and will likely average only \$57 to \$63 for the second. Second-quarter feedlot placements likely will

Cattle Prices Drop as Slaughter Weights Rise



total above last year's lows, but with a low Choice steer price, feeder cattle bids will be held down. [John Nalivka (202) 786-1830]

• Hogs

Hog prices in April averaged \$40 per cwt at the 7 markets, slightly below the estimated average farrow-to-finish cost of production (see tables 10 and 16 in back of issue). Preliminary data indicate that hog slaughter in April was about the same as a year earlier, despite the 4-percent decline in the March 1 inventory of market hogs weighing 120-179 pounds. These hogs are normally slaughtered in April and the first half of May, but some hogs weighing 180 pounds and over on the March 1 inventory may have been carried into April.

Nevertheless, the high rate of slaughter relative to inventory suggests that producers are continuing to reduce their herds from a year earlier, and that they are carrying out their March 1 farrowing intentions. Producers indicated they would have about the same number of sows farrow in June-August as a year earlier. The last breeding date for August farrowings was early May.

USDA is buying red meat to offset the additional beef production from the dairy cattle buyout. In addition, stocks of frozen pork products as of March 31 were down a fifth (252 million pounds) from last year, which should strengthen hog prices this spring and summer.

Hog Slaughter as a Share of Inventory

Year	Inventory 1/		Slaughter 2/	
	Thousand head		Percent	
Average, 1973-77	7,727	10,106	131	
Average, 1978-87	8,336	11,954	143	
1983	7,759	11,753	151	
1984	7,769	11,647	150	
1985	7,580	11,513	153	
1986	7,276	11,210	154	

1/ March 1 market hogs weighing 120 to 179 pounds. 2/ Federally inspected slaughter April through mid-May.

Beef production is expected to drop modestly in the third and fourth quarters. So, hog prices in the last half of 1986 are expected to average \$42 to \$48 per cwt.

With feed costs likely to decline further this fall, hog producers' returns are expected to increase and to exceed costs. Positive returns and a long-term outlook for low feed prices will give producers an incentive to expand their herds. In addition, some dairy producers who participated in the herd buyout may convert old dairy facilities to hog production as they look for the best ways to use available feed and labor. [Leland Southard (202) 786-1830]

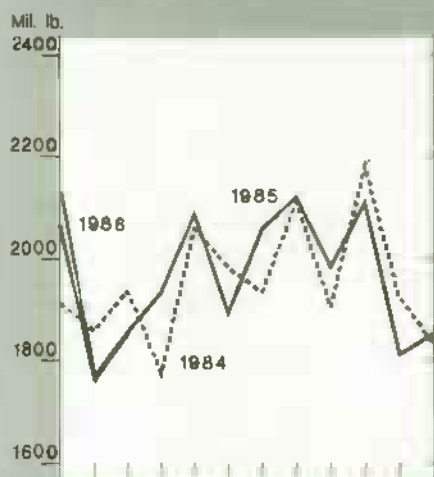
• Broilers

Exports of young chickens and parts will increase in 1986 because of the Export Enhancement Program, which gives exporters a bonus subsidy to sell at competitive world prices (see tables 10 and 13 in back of issue). Under the program, Egypt has purchased 50.7 million pounds to be delivered in 1986. However, even with the successful program, total U.S. broiler exports will still be small when compared with production.

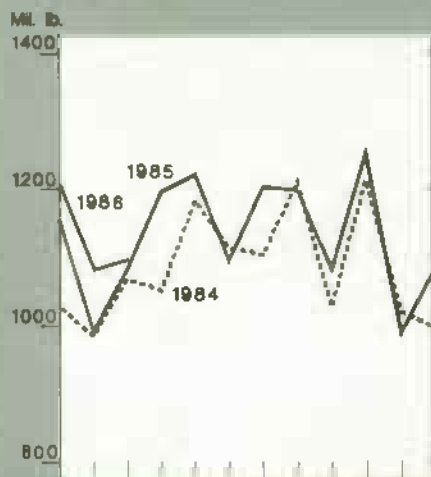
The Agricultural Statistics Board (formerly the Crop Reporting Board) recently estimated that 4.48 billion broilers were raised in the 1985 marketing year, up 4.6 percent from 1984. The estimated farm value was 30.2 cents per pound, down from 33.7 in 1984. The decline in price overshadowed the increase in numbers, and the value of production fell to \$5.7 billion, from \$6.0 billion in 1984. However, broiler producers may net more in 1985 because of the lower feed costs.

Production of Livestock and Products

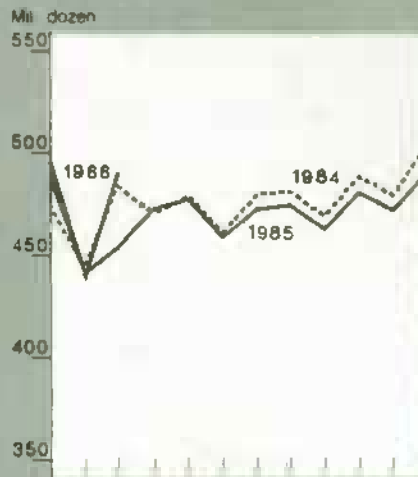
Commercial beef production



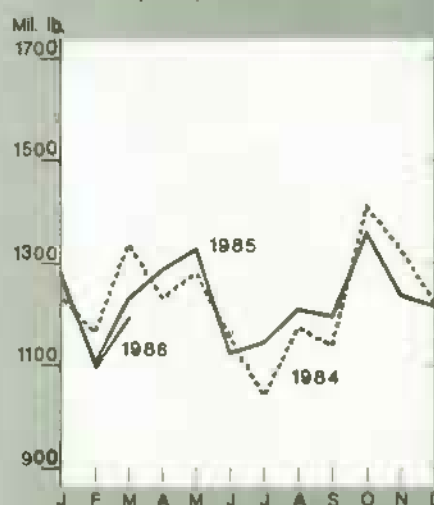
Broiler slaughter¹



Egg production



Commercial pork production



Turkey slaughter¹



Milk production



¹Federally inspected slaughter, certified

The top five broiler-producing States remained the same: Arkansas (number one), Georgia, Alabama, North Carolina, and Mississippi. (Allen Baker (202) 786-1830)

● **Turkeys**
The value of turkeys produced in 1985 was \$1.8 billion, up from \$1.7 billion in 1984. The increase resulted from more turkeys and higher prices. The number of birds raised in 1985 was 185 million, compared with 171 million in 1984. The live weight equivalent price in 1985 was 49.1 cents, up fractionally from 48.9 in 1984.

The ranking of the States was the same for value as for numbers of turkeys raised. The top five States, in descending order, were North Carolina,

Minnesota, California, Arkansas, and Virginia. These States produced 60 percent of all U.S. turkeys in 1985, down from 68 percent in 1984. In value, these States produced 56 percent of U.S. output, the same as in 1984. (Allen Baker (202) 786-1830)

● **Eggs**
Egg exports in 1986 are expected to rise from 1985, when short supplies and high prices discouraged trade (see tables 11 and 13 in back of issue). Japan is likely to take more egg products, primarily because the dollar has fallen relative to the yen, making the United States more competitive with other suppliers. Also, the Japanese Government is encouraging U.S. imports.

In addition, Algeria is eligible to receive eggs under the Export Enhancement Program. This program allows exporters to sell to Algeria at competitive world prices and receive a subsidy from the Commodity Credit Corporation. However, no exports are expected until 1987.

The value of U.S. egg production last year declined from 1984's \$4.11 billion to \$3.25 billion. Eggs produced during the marketing year rose less than 1 percent, but the price dropped from 72 cents in 1984 to 57 cents. (Allen Baker (202) 786-1830)

● Dairy

Under the Dairy Termination Program, USDA has accepted bids from almost 14,000 producers who marketed 12.3 billion pounds of milk in 1985 (8.7 percent of total marketings) (see tables 12 and 14 in back of issue). The inventory of the 14,000 producers whose bids were accepted totals 952,000 cows, 341,000 heifers, and 258,000 heifer calves. Participation in the program was high in Southern and Western regions, while signup was low in the important Northeast and Lake States regions.

About 66 percent of the program production is currently scheduled to exit during the first disposal period, April-August 1986. Another 11 percent will exit during September 1986-February 1987 and 23 percent during March-August 1987. The Commodity Credit Corporation has already sold nearly 200 million pounds of the beef to Brazil for delivery July through October. The 1985 farm bill mandates 400 million pounds of beef be purchased to offset effects of the buyout. Of this, 200 million pounds are destined for export. The sale to Brazil fulfills this commitment.

During second-half 1986, milk production is expected to be 4-5 percent below a year earlier. This drop would be sufficient to offset large production increases that occurred in early 1986 and would leave the 1986 total close to 1985's 143.7 billion pounds. With an expected increase of 2-4 percent in commercial use, this production would result in another large annual surplus, but only modest Government purchases during the second half of the year. (James Miller (202) 786-1830)

CROP HIGHLIGHTS

● Wheat

The world wheat situation in 1986/87 is expected to resemble that of the past 4 years: production outpacing consumption, leaving ending stocks at new highs (see tables 17, 18, and 25 in back of issue). World wheat production in 1986/87 is forecast at a record 510 million tons, up 7 million from 1985/86. Large crops are expected worldwide, especially in Canada, China, and the EC-12, and record crops currently are being harvested in India and Pakistan. Production declines are expected in the United States, the Soviet Union, Australia, and Brazil.

While world import demand is expected to increase by 4 million tons to 92 million in 1986/87 (July/June basis), world trade is likely to continue depressed compared with the annual average of 100 million tons traded in 1980/81-1984/85. Despite low prices, many importers have little foreign exchange and others continue to have domestic production near record levels.

Total 1986 U.S. wheat production is forecast at 2.18 billion bushels, down nearly 250 million from last year. Harvesting is already underway, with growers expected to combine the smallest acreage in 7 years.

Winter wheat seeding initially was down 3.8 million acres from 1985/86, but final signup in the 1986 acreage reduction program and some winter damage in the Central States made expected harvest area the smallest since 1978. As of May 1, winter wheat production was forecast at 1.60 billion bushels, 12 percent under last season. Another year of heavy program participation by spring wheat growers could decrease their plantings about 4 percent from last year.

Despite the reduced harvest, the total U.S. wheat supply for the 1986/87 marketing year will be a record 4.1 billion bushels, because the carryover of old-crop stocks is also a record. However, about 1.8 billion bushels will be in CCC inventory, the farmer-owned reserve, or pledged as collateral on regular 9-month CCC loans. Consequently, free stocks at the start of 1986/87 will be minimal, and disappearance of U.S. wheat will be limited to about the amount harvested, unless prices rise.

After six consecutive annual increases, 1985/86 wheat exports (July/June) from the major foreign competitors (Argentina, Australia, Canada, and the EC) are estimated to have declined about 5 million tons to 55 million. The decrease was largely due to weak world demand and poor harvests in Argentina and Canada in 1985/86, which limited the quantity and quality of wheat available for export.

Although production may rebound in Argentina and Canada in 1986/87, major foreign competitors' exports are not expected to increase. Sharply reduced prices may enable the United States to capture a large share of the 4-million-ton growth in world wheat trade in the coming season.

The new U.S. loan rate, which becomes effective June 1, will permit U.S. prices to adjust more freely to world supply and demand. The weaker dollar also will help in some markets. Many recent sales of U.S. hard red winter wheat have been in the \$110-\$120 per ton range, down from last year's \$135-\$145. The initial U.S. export forecast for 1986/87 is 30.5 million tons, up 4.5 million from 1985/86.

Total disappearance of U.S. wheat is forecast to be slightly more than 1986's production, lowering ending stocks on May 31, 1987, from their current record-high level. The season average farm price may be between \$2.25 and \$2.50 a bushel. (Scott Reynolds (202) 786-1691, Allen Schienbein, and Larry Van Meir (202) 786-1841)

● Rice

The world rice outlook for 1986/87 features continued large supplies, modest growth in import demand, and lower prices (see tables 17, 18, and 25 in back of issue). World production is forecast at a record 320 million tons (471 million, rough basis), up 5 million from last year and 2 million more than the 1984/85 record. After setting five consecutive records, foreign rice production declined 3 million tons to 311 million in 1985/86. The decline in 1985/86 was due to reduced production in China.

Foreign consumption in 1986/87 is forecast to rise 5 million tons to 316 million, equaling anticipated foreign

Export Sales

Average sales 1/ per week
for the 4 weeks ending:

	Feb. 13	Mar. 13	Apr. 10	May 8
	1,000 mt			
Wheat	551	418	330	275
Rice	21	14	10	55
Coarse grains	844	553	437	638
Soybeans	826	496	409	371
	1,000 bales			
Cotton	54	25	15	11

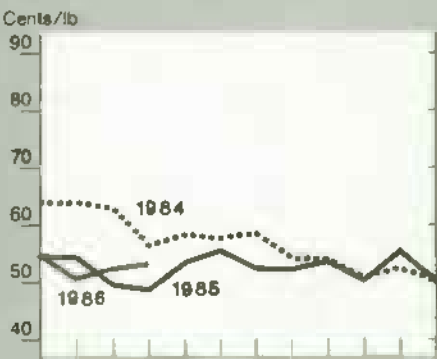
1/ U.S. export sales for current marketing year.

Commodity Market Prices

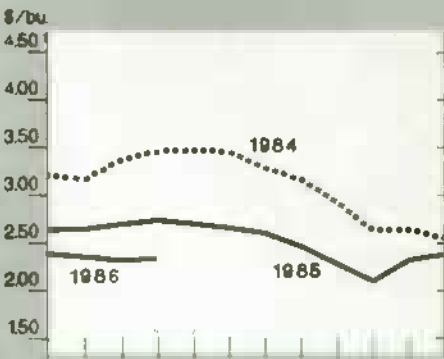
Choice steers, Omaha



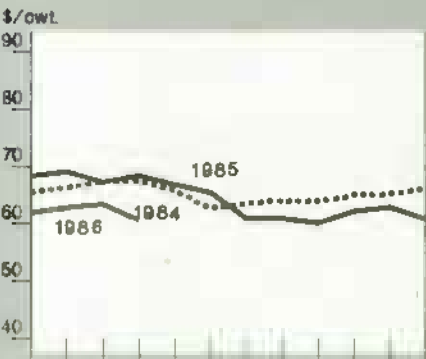
Broilers, 12-city average



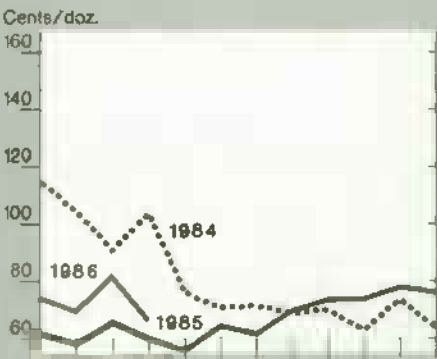
Corn, Chicago³



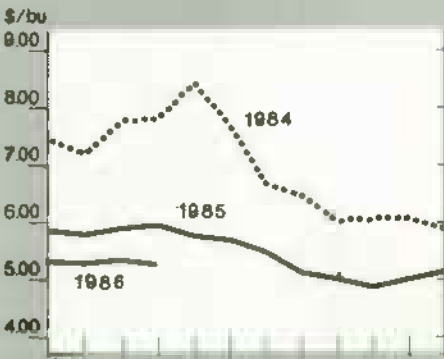
Feeder cattle, Kansas City¹



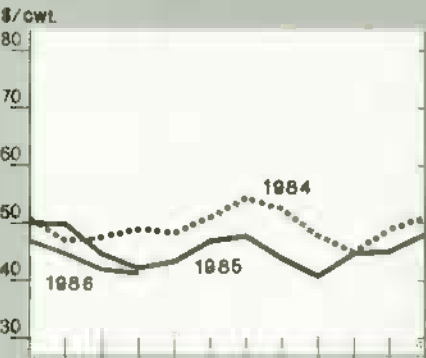
Eggs, New York²



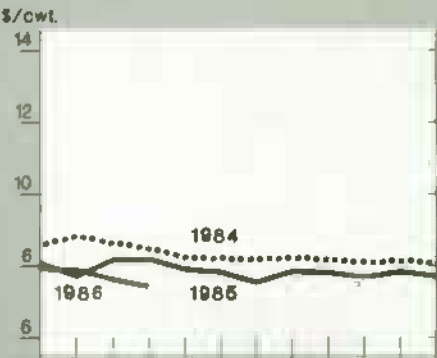
Soybeans, Chicago⁴



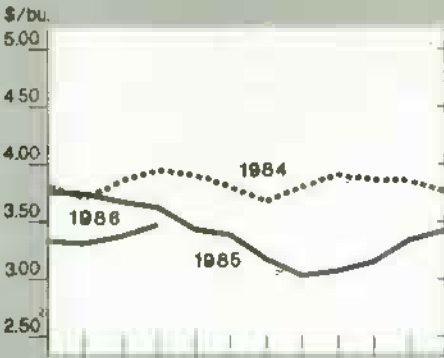
Barrows and gilts, 7 markets



Rice (rough), SW Louisiana



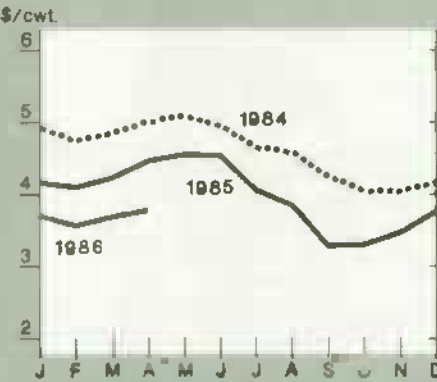
Wheat, Kansas City⁵



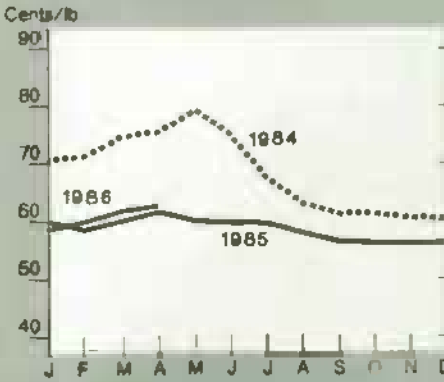
All milk



Sorghum, Kansas City



Cotton, average spot market



¹600-700 lbs., medium no. 2. ²Grade A Large. ³No. 2 Yellow. ⁴No. 1 Yellow. ⁵No. 1 HRW.

production. While foreign beginning stocks, less China, are expected to rise to a record 21.1 million tons, this is only about 10 percent of consumption, or a little more than 1 month's supply. The United States, on the other hand, is expected to begin 1986/87 with rice stocks well in excess of anticipated domestic utilization.

World rice trade in calendar 1986 is forecast at 11.7 million tons, up 300,000 from 1985. Competition among the major exporters will likely intensify due to lackluster growth in world import demand and changes in U.S. domestic rice policy. Thailand, the world's largest exporter, is forecast to export 3.9 million tons, down about 100,000 tons from 1985. This decline may result from increased U.S. price competition.

During 1985, the Houston price of No. 2, 4-percent broken rice averaged \$409 per ton and was about 80 percent greater than the average price of Bangkok 100-percent Grade B. By early May, however, the effects of the marketing loan program were being felt. Houston prices in mid-May declined to about \$240, compared with a Thai price of \$180, reducing the price ratio to 1.33.

To a lesser extent, the change in U.S. rice pricing will affect the quantities of rice exported in 1986 by the other major exporters—Burma, China, and Pakistan. These exporters sell rice of different types and qualities from those sold by the United States.

U.S. rice exports are forecast to increase from 1.9 million tons in 1985 to 2.2 million in 1986. While only 320,000 tons were exported during first-quarter 1986, export sales have picked up in recent weeks. Between March 13 and April 10, new sales averaged about 10,000 tons per week. Between April 10 and May 8, new sales averaged 55,000 tons per week.

However, between January and April, trade of high-quality rice virtually came to a standstill as buyers awaited lower U.S. prices. Thus, the U.S. export forecast for 1985/86 was lowered. But, exports in 1986/87 are projected to jump sharply.

The marketing loan program has given U.S. exporters an opportunity to regain commercial markets in places where the U.S. share had been declining rapidly, such as Western Europe,

Saudi Arabia, and South Africa. The lower prices also make it possible to sell U.S. rice in new markets such as Brazil and Papua New Guinea.

Since April 15, rice producers have been able to repay their 1985-crop loans at prevailing world market prices, or about 50 percent of loan values. The world price announcement is made each Tuesday at 3:00 p.m. EST. Prices become effective immediately and remain in effect until the next announcement.

Based on world prices, repayment rates for 1985-crop farm-stored rice loans were announced May 13 as \$3.58 per cwt for long grain and \$3.10 for medium and short grain. The average loan rate for 1985-crop rice was \$8.86 per cwt for long grain and \$6.60 for medium and short.

Producers have until June 30 to redeem their loans. As of May 7, 74 million cwt of rice, or about 54 percent of the 1985 crop, had been put under loan, and 11 million cwt had been redeemed. More redemptions are expected as export demand begins to increase. *[Janet Lwezey (202) 786-1841 and Scott Reynolds (202) 786-1691]*

● Feed Grains

World coarse grain production in 1986/87 is expected to decline 3 percent from last season's record level, because of a sharp drop in prospective U.S. output (see tables 17, 20, and 25 in back of issue). Foreign production, on the other hand, is expected to climb 3 percent; increases in China and the USSR will probably offset reductions in Australia, Canada, the EC, and several other countries. With more competitive U.S. prices and lower world prices spurring greater import demand, U.S. coarse grain trade and market share are expected to rise from 1985/86's poor performance.

Some of the major coarse grain exporters, especially Australia and Canada, are reacting to low prices in 1985/86 (and even poorer prospects for 1986/87) and are expected to cut plantings. Among the major foreign coarse grain-exporting nations (Canada, Argentina, Australia, Thailand, and South Africa), exports are forecast to fall about 9 percent, or 2.5 million tons.

However, South Africa has re-emerged in corn and sorghum trade. Continued recovery from the 1982/83-1983/84 drought and higher beginning stocks may permit South Africa to increase exports to 2 million tons this season. Although this is a poor showing compared with almost 5 million tons in 1981/82, it is still a dramatic improvement over every year since. Argentine coarse grain production and trade are forecast down in 1986/87, but nonetheless will remain quite high.

Global trade in 1986/87, excluding intra-EC trade, is estimated at about 90 million tons, more in line with traditional trade flows prior to last season. Much of the increase in world trade will accrue to the United States, partly from countries that are delaying purchases until the beginning of the U.S. crop year.

The ratio of U.S. to Argentine corn export prices currently averages 1.15-to-1. This ratio will probably fall as the new U.S. loan rates become effective—making U.S. corn and sorghum much more price competitive.

U.S. coarse grain trade is estimated at about 42 million tons for 1985/86 (October/September), and is forecast to increase 16 percent in 1986/87. However, with the exception of 1985/86, next year's U.S. shipments will still be the lowest since the mid-1970's. This is because livestock are the largest consumers of grain, and several years may be required before lower world grain prices will be reflected in higher livestock returns, spurring increased livestock production and feed use.

In addition, many importing countries have policies that at least partially insulate their producers from changes in world prices. Although the EC, Canada, and Argentina will have lower supplies in 1986/87, they will still have sufficient stocks to export quantities at, or even above, 1985/86.

U.S. stocks of grain corn on April 1 totaled 5.95 billion bushels, about 100 million below most trade estimates. This means implied feed and residual disappearance was about 100 million bushels greater than expected. This development, along with widespread speculation about the damage to Soviet grain and feed from the April nuclear accident at Chernobyl, has led to volatility in U.S. futures and spot market grain prices.

U.S. Crop Production

	'85/'86 est.	'70-'85 trend proj. to '86/'87	'86/'87 fore.	Change	
				'85/'86 to '86/'87	Trend to '86/'87*
					Percent
Wheat (bil. bu.)	2.4	2.8	2.2	0	-14
Rice (mil. cwt, rough)	136	156	130	-4	-16
Feed grains (mmt)	274	247	235	-13	-3
Soybeans (bil. bu.)	2.1	2.2	1.9	-7	-14
Cotton (mil. bales)	13.4	12.7	11.0	-19	-13

*Percent change from trend to 1985/86: wheat, -8; rice, -10; feed grain, 12; soybeans, -2; cotton, 7.

The first estimate of the 1986 corn crop is 7.6 billion bushels, 15 percent below last year's record and 0.1 billion below 1984. However, with a projected record carryin, 1986/87 corn supply could be 9 percent above last year. With the marketing year switched to a September-to-August basis, beginning stocks for 1985/86 are up sharply from last month's estimate. Exports are expected to end their decline of recent years, and domestic use will likely increase as well. [David Hull (202) 786-1840 and James Cole (202) 786-1691]

Oilseeds

The outlook for 1986/87 points to another record for world oilseed production, despite an expected 5-million-ton drop in the U.S. soybean crop (see tables 17, 21, and 25 in back of issue). The world outlook is being shaped partly by changes in U.S. farm programs. While the loan rate for soybeans in 1986/87 is expected to drop 5 percent, the wheat and corn loan rates are declining 25 percent or more.

Since world grain supplies will continue to far exceed use, world prices for grains likely will show a sharp drop in 1986/87. With the U.S. soybean loan rate providing a higher price floor than that for grains, foreign oilseed production should expand. Also, some foreign oilseed crops should improve from drought-reduced levels in 1985/86.

October-March U.S. soybean exports, at 13.5 million tons, were 17 percent above a year earlier. For the remainder of the crop year, however, U.S. exports may slow as the South American crops are harvested and ex-

ported. Prices in Rotterdam for Argentine-origin soybeans are about \$12 per metric ton below U.S.-origin prices.

Also, Brazil and Argentina have incentives to crush and export soybean meal. In Argentina's case, lower taxes on product exports will lead to large soybean meal exports. In Brazil's case, the need to crush to meet domestic vegetable oil demand is resulting in soybean meal supplies that exceed domestic needs. This makes large quantities of soybean meal available for export. Despite Brazil's reduced soybean crop, Brazilian exports of soybean meal in 1986/87 may decline only slightly from last year.

After averaging \$5.31 a bushel (Central Illinois) in March, U.S. soybean prices declined slightly to \$5.23 in April. These prices likely are still sufficient to prompt loan redemptions. As of May 7, CCC soybean loans outstanding totaled 425 million bushels, down from the season high of 412 million bushels on February 12.

One of the most important factors in the oilseeds complex is the extraordinarily weak market for vegetable oils. Soybean oil stocks continue to grow and exports remain exceptionally weak. Palm oil has been priced below soybean oil since last November. By March, the palm oil discount averaged more than 4 cents a pound.

Furthermore, cottonseed oil has been selling slightly below soybean oil since May 1985. Normally, cottonseed is regarded as a premium oil and sells for a higher price than soybean.

The weak oil market has placed a greater pricing burden on meal, even though domestic soybean meal disappearance through March was behind last year by about 1.5 percent. Higher prices for soybeans relative to grains, plus ample alternative supplies of protein, probably account for the slight drop. [Roger Hoskin (202) 786-1841 and Jan Lipson (202) 786-1691]

Cotton

The world will continue to have a large surplus of cotton in 1986/87 (see tables 17, 19, and 25 in back of issue). Ending stocks are expected to remain about the same as the record 47.3-million-bale beginning stocks.

Beginning stocks in the United States, China, and Pakistan will be 149, 112, and 90 percent, respectively, of the countries' 1985 use and will represent two-thirds of all world stocks. Each country will be aggressively searching for markets. But, despite likely growth in both exports and consumption for all three in 1986/87, by the end of the season these three countries may still hold stocks equivalent to 110 percent or more of their expected 1986 consumption.

The U.S. cotton outlook for 1986/87 is closely linked to the new farm bill. USDA has, as required, announced a formula for estimating the world price of cotton, adjusted to U.S. quality and location. U.S. market prices will drop to the world level beginning August 1. As of mid-May, the formula was yielding an estimated world price of about 33 cents for the base quality, compared with a 1986-crop loan rate of 55 cents a pound. Competitive prices next season are expected to nearly triple the U.S. share of world cotton exports, from 10 percent in 1985/86 to 28 percent.

Program features relating to certificate payments are also crucial to the U.S. outlook. The most important, in terms of the quantity of cotton involved, are the marketing certificates to be issued to first handlers and those issued as inventory protection payments. Inventory protection payments will take into account the difference between the 1985 loan rates plus carrying charges until August 1st and the world price on August 1st. They are made for any cotton not under CCC loan or in CCC inventory. The certificates are redeemable for cotton only.

The amount of cotton that will move out of CCC inventory and the loan program to satisfy certificate requirements depends partly on the adjusted world price on August 1, 1986 (for inventory protection), and the average for the 1986/87 season (for first handler certificates). Without the certificate programs, a large portion of the 1986/87 supply would have consisted of loan and CCC-owned stocks of old-crop cotton.

No large drop in 1986 world production is likely. Output is forecast at 75.5 million bales, slightly below 1985's 77.9 million. The United States is expected to account for all of the decline, since net production in foreign countries may change little. Much depends on developments in the Soviet Union and China. These two countries alone accounted for 40 percent of world production and 25 percent of world exports in 1985.

World import demand is expected to rise, increasing about 13 percent to a near-record 21.5 million bales. Importers' consumption and ending stocks are also likely to go up. Depleted stocks, pent-up demand, and low prices encouraging further stockpiling will add to 1986/87 world sales.

The bright spot in the 1985/86 U.S. cotton season has been the rebound in domestic mill use. Although textile imports remain a problem and cotton prices have risen relative to manmade fibers, expected mill use of 6.3 million bales should be the largest since 1979/80.

This season's performance reflects a consumer preference for cotton and, to some extent, a perception that cotton prices are going to fall relative to manmade fibers. In mid-May, futures prices for 1986-crop cotton were around 37 cents a pound, nearly 30 cents less than nearby futures. U.S. mill use in 1986/87 is expected to continue rising, possibly reaching 6.8 million bales. [Sam Evans (202) 786-1840 and Carolyn Whitton (202) 786-1691]

● Tobacco

On April 25, USDA announced new 1986 marketing quotas for flue-cured and burley tobacco (see table 24 in back of issue). With the April 7 enactment of the Consolidated Omnibus Budget Reduction Act of 1985, previous quota announcements became invalid. Both the flue-cured and burley

basic quotas were reduced 6 percent, the maximum permitted under the new law. Because of undermarketings in 1985, the flue-cured effective quota was reduced 9 percent from a year ago to 692 million pounds. The burley effective quota also was lowered about 9 percent.

Under the new amendments to the Agricultural Act of 1938, quotas now have to be based on three factors: intended purchases by cigarette manufacturers, average annual exports for the 3 preceding years, and the amount of tobacco needed to attain specified reserve levels. However, the total of the three components for both flue-cured and burley came to less than the quotas permitted by law; they were below 94 percent of the 1985 quotas. Thus, the maximum allowable cut was made.

Flue-cured tobacco disappearance in the current marketing year may fall from last year's 935 million pounds, mainly because of reduced domestic use. With the smaller 1985 crop, the carryover on July 1, 1986, probably will decline about 5 percent from last July's 2.08 billion pounds. Production in 1986 is expected to drop from last year's 800 million pounds.

Total disappearance of burley tobacco in 1985/86 is likely to increase from 1984/85's 556 million pounds, with a rise in both domestic use and exports. Burley sales this season totaled about 550 million pounds, 18 percent less than last season. The burley carryover next October 1 may be about 2 percent below a year earlier.

Acreage allotments for 1986 were reduced about 12 percent for Kentucky-Tennessee fire-cured and 25 percent for Kentucky-Tennessee air-cured. Ohio filler and Wisconsin binder allotments were reduced about 20 percent, but the Virginia fire- and sun-cured allotments were set about the same as last year.

Prices for most types of 1985-crop tobacco were down from the previous year. Auction sales for the 1985 crop of Maryland tobacco ended on May 1. Prices averaged \$1.32, 8 cents lower than a year earlier. [Verner N. Grise (202) 786-1840]

● Fruit

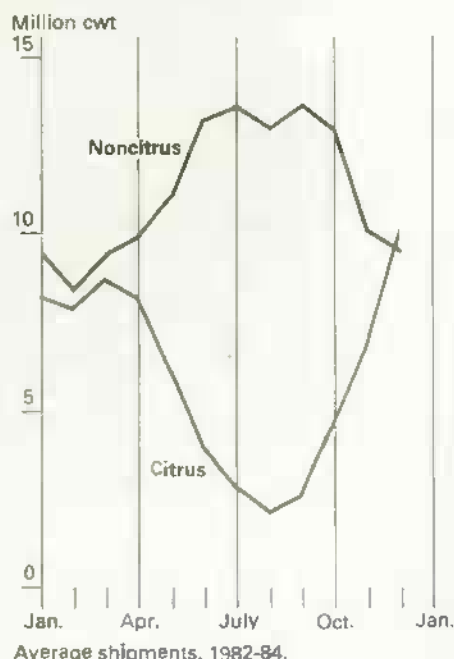
Approximately 90 percent of total fruit production came from seven States in 1982-84: California, Florida, Hawaii, Michigan, New York, Texas, and Washington. Altogether, production averaged 26.5 million tons a year valued at \$5.5 billion (see table 22 in back of issue).

California is the leading fruit producer, accounting for 41 percent of production during 1982-84. California grows a major portion of such diverse crops as apricots, grapes, cling peaches, nectarines, prunes and plums, avocados, and strawberries. It also produces approximately 30 percent of the citrus—ranking first in lemons and second to Florida in oranges.

Florida accounted for 31 percent of total fruit production in 1982-84. Washington ranked third with 8 percent, leading in apples, growing approximately 30 percent of the U.S. total. New York and Michigan are also major apple States, accounting for 2.9 and 2.4 percent of U.S. fruit production, respectively. Citrus and peaches are the two leading fruits in Texas, while most tropical fruits are grown in Hawaii.

Major citrus fruits are available year-round. Arizona-California oranges and lemons are marketed under a Federal marketing order that can control the volume of fruit shipped each week.

Noncitrus Dominates Fresh Fruit Shipments in Summer



Florida oranges are also regulated under the marketing order, but it has no volume control provision, just the authority to control size and grade.

From October through June, most grapefruit come from Florida and Texas. During the summer, most are from California. Tangelos and Temples, which grow only in Florida, have 4- to 5-month marketing seasons that begin in October. Early-season tangerines come from Florida in October. Late shipments from California begin in November or December and run through May.

Because of fruit varieties, climate differences, and storage problems, marketing seasons of noncitrus fruit vary. Apples, pears, and grapes are marketed over a long period of time because they can be put in cold storage.

Most summer fruits are marketed in a short time. Shipments of early-season peaches from California and the Southeast begin in early May, followed by late-season peaches from Michigan, New Jersey, Pennsylvania, and Washington. The marketing season usually lasts until October.

Shipments of early-season California sweet cherries start in late April, followed by late-season sweet cherries from Michigan and Washington. The shipping season for fresh plums is similar to that for peaches. However, the fresh apricot season starts in May and lasts for only 9 weeks. Nectarine season is generally from June through September.

Shipments of apples, the leading non-citrus fruit, vary with growing area. Some start as early as June; Virginia, one of the leading producing States, starts in June. Thus, the marketing season for some States overlaps Washington apples in cold storage from the previous season.

Fresh Bartlett pears from the West Coast last only 2 to 3 months—early-season Bartletts come from California and late-season ones from Oregon and Washington. Winter pears such as D'Anjou and Bosc, most of which are from Oregon and Washington, are kept in cold storage for several months. Consequently, their marketing season starts in October when the Bartlett season is almost over and lasts through the following spring. Avocados

grow in both California and Florida, but because their marketing seasons are complementary, avocados are available year-round.

In recent years, imports of fresh fruit, particularly summer fruits from Chile, have increased substantially. Shipments of these summer fruits are from early winter through late spring when domestic supplies are small. However, bananas, the leading imported fruit, are marketed year-round.

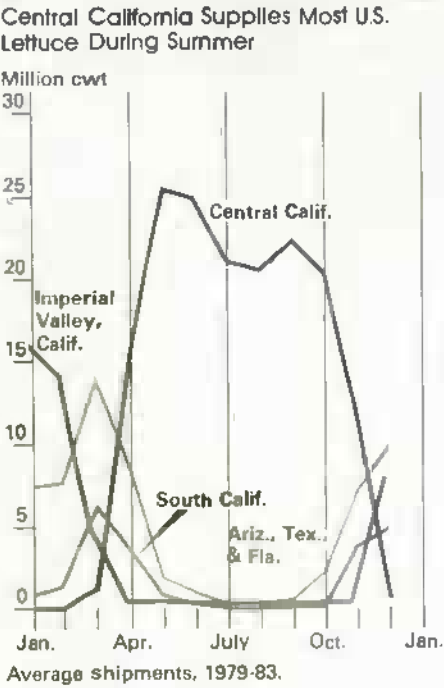
During all months on average, total shipments of noncitrus were considerably heavier than those of citrus because large, steady banana shipments account for approximately 40 percent of total noncitrus fruits. Consequently, noncitrus accounts for almost two-thirds of the total shipments. Seasonal increases in supplies of peaches, plums, nectarines, and grapes contribute to peak shipments of noncitrus fruits in June, July, and September.

Shipments of citrus fruits are heaviest from December to April, with month-to-month variations generally following changes in the movement of oranges and grapefruit. Shipments of fresh oranges are heaviest November through April, with early and mid-season varieties, and navel and Florida Valencias accounting for most of the supplies. Fresh orange shipments during June-October consist mainly of California Valencias. Shipments of grapefruit are usually heaviest during the winter months, when harvest is most active in Florida—the principal producing State. [Ben Huang (202) 786-1766]

● Vegetables

The 1982 Agricultural Census (the most recent one done) reported that a total of 69,109 farms harvested 3.3 million acres of vegetables and melons (see table 23 in back of issue). Five States—Arizona, California, Florida, Michigan, and Texas—represent approximately 50 percent of this acreage. However, production in these States fluctuates with the rhythm of the seasons.

Carrots, celery, lettuce, onions, and tomatoes, totaling 140 million cwt, provide over half of the fresh vegetables shipped in the United States. Spring sees the heaviest shipments, with 30 percent of annual volume moved between April and June. Tomato shipments are particularly heavy during this period, when Florida dominates the market. Florida's tomato



dominance ends in June, when California and other States begin shipping fresh tomatoes.

During summer, fresh vegetable supplies are abundant and home gardens and produce stands become increasingly important. The lion's share of summer commercial vegetable supplies comes from the West, which has 42 percent of U.S. vegetable acreage.

California is the primary summer vegetable State. With its long harvest season and varied crop mix, California allocates 46 percent of its vegetable acreage to iceberg and romaine lettuce and fresh market tomatoes. Arizona's crop mix is similar to California's, though somewhat more specialized, with 56 percent of its vegetable acreage in iceberg and romaine lettuce and cantaloupes.

The South, with 26 percent of U.S. vegetable acreage, is the primary source of vegetables during the cooler months. The bulk of the production in this region is for the fresh market. Florida and Texas are the two most important vegetable States in the South. Most of Florida's acreage is in snap beans, sweet peppers, radishes, sweet corn, tomatoes, and watermelons. Texas growers devote most of their acreage to cabbage, cantaloupes, carrots, dry onions, and watermelons.

Vegetable Farms and Harvested Acreage by Region

Region	Number of farms	Harvested acreage
Northeast	11,757	316,298
North Central	18,400	780,579
South	27,669	857,078
West	11,283	1,376,685
Total	69,109	3,330,637

1/ Agricultural Census of 1982.

SOURCE: Bureau of the Census, Department of Commerce.

The Northeast, with 17 percent of U.S. vegetable farms, accounts for 10 percent of the harvested vegetable acreage. New York growers produce mainly snap beans, sweet corn, cabbage, dry onions, and green peas.

The North Central States harvest 24 percent of the U.S. vegetable acreage, have 27 percent of the U.S. vegetable farms, and have extensive processing facilities. Michigan, with a large percentage of fresh-market production for the region, harvests mainly asparagus, snap beans, cucumbers for pickles, sweet corn, and tomatoes.

As season changes force regional shifts, the U.S. vegetable mix and dependence on imports change. Fresh tomato imports from Mexico during the winter months—January through April—constitute a significant share of the U.S. winter fresh tomato market. Mexican growers have benefited over the years from supply disruptions in Florida, usually due to freezes. Without imports, U.S. consumers would likely pay a premium for fresh tomatoes during the winter.

Because supply centers vary according to season, supplies tend to be light during the period when the primary supply region changes. The uncertainties associated with these regional supply shifts usually cause prices to rise moderately at both the grower and retail levels.

However, only a few vegetables are subject to price spikes as a result of regional supply shifts—most notably lettuce and tomatoes. Central California dominates the lettuce market for

most of the year. However, from January through March the southern and interior valley portions of California, along with Arizona, Texas, and Florida, are the primary sources. Price risk is greatest when lettuce dominance is shifting from the various sources back to central California. Tomato prices are generally sensitive when Florida's supply dominance ends and California enters the market.

Seasonal shifts are not as important for carrots, celery, and onions, because no one State is the sole supplier and their storage life is longer. The three are in abundant supply throughout the year from all regions, but most summer supplies are from the West. (Shannon Reid Hamm (202) 786-1767)

• Sugar

Prior to 1982, U.S. sugar imports were subject only to fees and duties (see table 24 in back of issue). However, when the world raw sugar price fell below 9 cents a pound in early 1982, restrictive country-by-country import quotas were established in May 1982.

The 1985 Act mandates that beginning after the 1986 quota year the sugar program be run at no cost to the Government. After the quota level for the 1986 quota year was announced in September 1985, domestic prices fell. The lower prices led Florida cane processors to forfeit over 300,000 tons of sugar to the CCC. The 1986 quota year was extended for 3 months, effectively reducing sugar imports to the United States in fiscal 1986 by approximately 425,000 short tons, raw value.

The Caribbean Basin Initiative (CBI) was begun by President Reagan in 1984 to provide aid, trade, and assistance to 27 countries in Central America, northern South America, and the Caribbean. One way the initiative boosts economies of those countries is by allowing duty-free entry of their sugar into premium-priced U.S. markets.

Based on world and U.S. raw sugar prices during 1982-1985 (reduced by import fees and shipping costs), the sugar exports of the Caribbean countries were worth about \$2.4 billion during that period.

The United States is the largest market for sugar produced in the Caribbean Basin. In 1980 and 1981, over 63 percent of Caribbean sugar came to the U.S. market. The Caribbean Basin countries exported an average of 1.39

U.S. Sugar Imports and Consumption

Calendar year	Imports	Consumption	Imports' share of consumption
	Million tons		Percent
1980	4.5	10.2	43
1981	5.0	9.8	45
1982*	5.0	9.2	33
1983	2.7	8.9	32
1984	5.0	8.6	34
1985	2.1	8.1	26

* Import quotas imposed.

million metric tons of sugar annually to the United States during 1970-81—about one-third of all U.S. sugar imports.

However, when quotas were imposed in May 1982, annual Caribbean sugar exports to the United States fell to an average of 945,000 metric tons, a decline of over 30 percent. Moreover, exports in 1985 were 878,000 metric tons, and could fall to 599,000 metric tons during the 1986 quota year.

Access to the U.S. market has been especially valuable to the CBI nations because sugar sold to the United States commands a considerable premium over world prices. In 1984 and 1985, the average U.S. domestic raw sugar price was 320 and 403 percent higher, respectively, than the world spot price.

World prices are currently 8-9 cents a pound and U.S. prices are 20-21 cents. Thus, the reduction from the 1985 quota to the 1986 quota will lower the Caribbean area's sugar export revenues by \$63 to \$67 million (after shipping costs and assuming all other sugar exports are at world prices).

The President announced to CBI leaders that commodity assistance would be extended to countries which lost foreign exchange because of reduced sugar exports to the United States due to the extension of the 1986 sugar quota year. In order to limit the budgetary impact, the decision was made to use in-kind commodity assistance, the main vehicle for the assistance is Section 416 of the Agricultural Act of 1949, as amended. In response to requests by eligible countries, the U.S. Government will provide assistance to CBI and selected countries up to the level of the dollar value of the estimated quota loss or on the basis of legitimate requirements. (Fred Hoff (202) 786-1770 and David Harvey (202) 786-1769)



Farm Income

1986 FORECAST UPDATE

Farmers' cash expenses have declined nearly 10 percent since 1984—the drop constituting a unique positive component in the current farm income picture (see table 31 in back of issue). Had cash costs remained at 1984 levels, 1986 net farm cash flow would have been \$11 billion lower than now projected. Together, 1985 and 1986 mark the first time since the early 1930's that cash expenses have dropped in consecutive years.

The unprecedented magnitude of the decline comes from three main sources:

- plummeting fuel prices and associated drops in energy-based inputs such as fertilizer;
- smaller interest expenses from lower rates and declining sector debt;
- an acreage cut due to high participation in Government farm programs with substantial set-aside requirements.

While projections of cash expenses in agriculture are down \$5-\$6 billion since the first 1986 forecast, the net cash income estimate has been raised by a similar amount since November, to \$42-\$46 billion, about matching 1985's record level.

Asset Values Continue Loss

U.S. farmland values dropped 12 percent between April 1, 1985, and February 1, 1986. This new information has

Definitions of Farm Financial Indicators

Net farm income measures the net value of agricultural production for a given calendar year, regardless of whether commodities are sold, placed under CCC loan, fed, or placed in inventory during the year. It is computed as the difference between gross farm income, including the value of inventory change, and total farm production expenses (including depreciation). It includes benefits and expenses associated with farm operator households, such as the value of commodities consumed on the farm and the rental value of the farmhouse.

Net cash income measures the total income that farmers choose to receive in a given year, regardless of the level of production or the year the marketed output was produced. It approximates the income available to farmers for purchasing assets, retiring debt, and covering all other expenditures. It is calculated as the difference between gross cash income received from farming and cash expenses for the year, and excludes income and expenses associated with operators' farm dwellings.

Net cash flow is the sum of net cash income, the change in loans outstanding, and net rent paid to all landlords,

minus gross capital expenditures. It measures cash available to operators and landlords from farming in a calendar year and indicates the short-run financial position of farmers and their ability to meet current obligations.

Farm assets are the sum of real estate and non-real estate assets, including livestock and poultry, machinery and motor vehicles, crop stored, and financial assets.

Farm liabilities include total real estate debt, non-real estate debt, and outstanding CCC loans.

Farm equity is the difference between total farm assets and liabilities.

Debt-to-asset ratio is total farm assets divided by total liabilities. This measure of farm financial strength indicates the proportion of farm assets which is owed to creditors. In general, the lower the debt-to-asset ratio, the more financially sound a farm business is considered.

Rate of return to equity is a measure of profitability and describes the returns per dollar of equity capital invested in the farm sector.

necessitated revisions in the forecasts of 1985 and 1986 balance sheet components.

Total farm equity is likely to have fallen more than earlier projected, about 12 percent for 1985, and it is now forecast to decline another 3 to 5 percent in 1986. Meanwhile, debt-to-asset and debt-to-equity ratios, which likely registered further increases in 1985, are forecast to rise only slightly in 1986. Declining farm asset values should continue to outpace falling farm debt, but at a slower rate than in recent years.

Net farm income this year is currently forecast to total between \$26 and \$30 billion, down from 1985's expected \$29 to \$32 billion. Real (\$1982) net farm income is forecast between \$23 and \$26 billion, compared with \$26 to \$29 billion in 1985.

Net cash income is also likely to register a decline this year, although a very small one, falling to \$42-\$46 billion from the expected record high of \$43 to \$46 billion in 1985. Real net cash income should total between \$36 and \$40 billion, compared with \$38 to \$41 in 1985. Relatively low gross income in 1986 will be offset to a degree by the sharply lower cash and total production expenses.

Off-farm income, which continues to comprise a significant portion of total income for farms in the lower sales classes, should rise again in 1986 with growth in the general economy. Because of lower expected value of outstanding loans and slightly lower capital expenditures, net cash flow will likely register a small rise from last year.

Crop Cash Receipts Falling

Total crop receipts are projected to range from \$60 to \$64 billion in 1986, down from 1985's likely \$72 to \$74 billion. Last year, net CCC loans probably accounted for about 16 percent of

crop receipts, totaling \$11.8 billion. With reduced loan rates, net CCC loans should drop to \$8 to \$10 billion in 1986. However, this could still be almost 15 percent of total receipts. Placements of corn under loan—nearly \$5 billion during the record-setting fourth quarter of 1985—should be strong again in 1986, but lower than last year.

Significant declines can be expected in cash receipts for all crops, with reductions of a fourth or more in wheat, rice, corn, oats, and sorghum. These crops (except rice) are concentrated in regions of the United States that have experienced the most significant declines in land values in recent years.

Livestock Receipts May Slip

Livestock receipts, which were previously expected to remain even with last year, are now expected to fall about \$1 billion, to \$67-\$71 billion (see table 32 in back of issue). With poultry and egg receipts up only marginally, total livestock receipts could be down by 1 to 3 percent from 1985.

It should be noted, however, that although livestock receipts will likely be down, \$1.8 billion will be added to dairy farmers' income between now and 1991 in Government payments from the dairy buyout program.

Production Expenses Going Down 5 to 7 Percent

With substantial declines projected for most of the major expense categories, total production expenses could register an overall reduction of 5 to 7 percent. This would leave production expenses at \$124 to \$128 billion, the lowest since 1980. Cash expenses are likely to fall below 1980, totaling \$101 to \$105 billion. The difference between total expenses and cash expenses reflects depreciation and costs associated with farm operator households.

The most profound impact on the farm income statement in 1986 will come from the recent sharp downturn in fuel prices. Lower fuel prices are expected to continue, leaving the average annual price for fuels and oil 20 to 25 percent below 1985—down to the lowest level since 1979. Such a large change in fuel prices is not unprecedented; in 1980, they increased well over 35 percent.

The decline in fuel prices could have broad secondary effects, cutting prices for related items such as fertilizer and

pesticides over the next year or so. Total fuel and oil expenses are expected to decline nearly \$2 billion from 1985, contributing significantly to the expected 12- to 16-percent drop for manufactured input expenses. Most of the roughly 25-percent drop in fuel expenses is attributable to lower prices, although acreage reductions are also contributing to the decline.

From 1973 to 1981, fuel expenses as a percentage of total production expenses increased steadily, peaking at 6.3 percent in 1981. However, fuel outlays in 1986 may be only about 4 percent of total expenses, the lowest since 1974.

Interest expenses are also expected to decline significantly in 1986. Interest payments as a percentage of total production expenses more than doubled between 1970 and 1982. Since 1982, they have declined somewhat, but the sharpest drop yet is expected to take place in 1986. Although market rates have fallen sharply in recent years, it is important to keep in mind that many current outstanding loans are carried at higher-than-current interest rates. The extent to which loan write-offs by banks will reduce debt is difficult to project.

Depreciation, a noncash production item, is expected to continue on the downward trend that began in 1983. Changes in depreciation follow (with a lag) movements in capital expenditures. Farm capital expenditures fell an annual average of 9 percent between 1980 and 1984, with the sharpest drop in 1982. Depreciation slipped about 2 percent in 1983 and 1984, and likely declined another 3 to 5 percent in 1985.

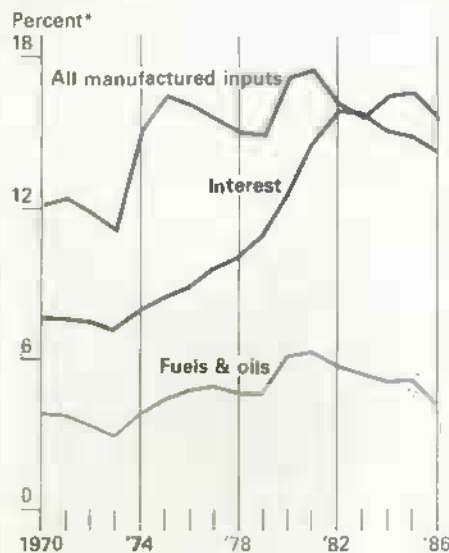
For 1986, depreciation could fall 4 to 6 percent, dropping below \$22 billion for the first time since 1981. There is no direct impact on the cash-flow position of farmers when depreciation (a non-cash flow account) falls and net farm income rises.

Farm-origin input expenses will also decline in 1986, aided by an expected 4- to 6-percent drop in feed outlays. Prices of feed grains (mainly corn) will continue to fall, offsetting a possible small rise in use.

Government Payments May Represent 7 to 10 Percent of Gross Income

Total direct Government payments, including the dairy buyout program, are forecast at a record \$10 to \$13 billion for 1986. This would amount to 7 to 9 percent of gross farm income. (Note,

Interest & Manufactured Inputs Taking Smaller Share of Production Expenses In Last 2 Years



*Percent of total production expenses. 1986 forecast.

too, that program commodities account for only two-fifths of the farm sector's gross income.) By comparison, direct Government payments averaged about 3 percent of gross farm income from 1970 to 1980, and 4 to 5 percent in 1985. The anticipated decline in net CCC loans will probably be more than offset by higher direct payments.

As much as three-fourths of direct payments could come in the form of deficiency payments, since provisions of the 1985 Food Security Act reduced loan rates while freezing target prices. Deficiency payments will likely be an essential element in farm income for the next couple of years.

The farm bill also established that 40 percent of deficiency payments on the 1986 crop may be paid in advance, with one-quarter of the advance in the form of PIK certificates rather than cash. This could result in \$700-\$900 million in advance deficiency PIK payments, in addition to the \$500-\$600 million in PIK diversion payments.

Most of the advances will occur in corn, with a small amount in rice and cotton. Feed grain farmers will probably receive about half of the deficiency payments, and wheat farmers almost a third. Wheat and feed grain farmers could derive about half of their gross cash income in 1986 from Government programs, including CCC loans.

Balance Sheet of U.S. Agriculture

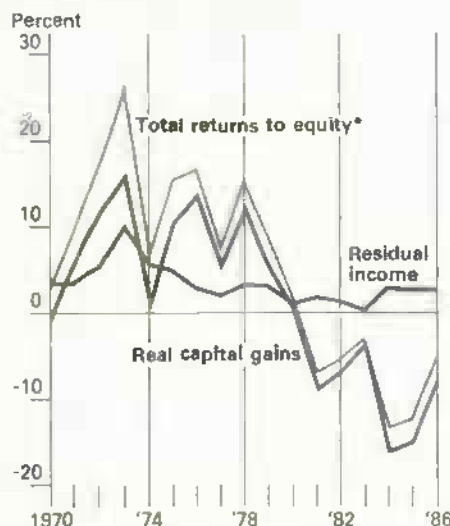
Item	1982	1983	1984	1985P	1986F
\$ billion					
Assets					
Real estate	745.6	736.1	639.6	535-585	510-570
Non-real estate	232.2	220.4	216.5	200-230	190-235
Total assets	977.8	956.5	856.1	755-805	725-775
Liabilities					
Real estate	101.2	103.7	102.9	96-101	93-99
Non-real estate					
CCC loans	15.4	10.8	8.7	14-18	17-21
Other non-real estate	87.0	88.0	87.3	82-86	80-86
Total non-real estate	102.4	98.8	96.0	98-102	99-105
Total liabilities	203.7	202.5	198.9	195-202	194-201
Total farm equity	774.2	754.0	657.2	555-605	525-585
Selected ratios					
Percent					
Debt-to-asset	20.8	21.2	23.2	25-27	24-28
Debt-to-equity	26.3	26.9	30.3	33-35	33-37

1/ As of December 31. Excludes households. P=preliminary. F=forecast.

Selected Financial Ratios for Agriculture

Ratio	1981	1982	1983	1984	1985	1986
Percent						
Net farm income-total assets	3	2	1	4	3-4	3-4
Value of prod.-fixed assets	17	17	15	21	21-23	18-22
Total return on equity	-7	-6	-4	-13	-11-13	-3-7
Interest expense-net cash income plus interest	35	35	35	34	29-31	26-30
Total expenses-total gross income	82	85	90	80	80-82	80-84
Net cash income-debt	19	19	19	20	21-24	21-23

Total Returns to Farm Equity Still Negative, But Improving



*Rate of return to equity from deflated capital gains and residual income combined. 1986 forecast.

While cash income forecasts have been revised upward, the overall financial picture of the farm sector could worsen slightly this year, as declines in farm assets and equity continue. This will likely mark the fifth consecutive annual decline in farm asset values, which peaked at just over \$1 trillion in 1981.

Because of the 12-percent decline in land values, the preliminary estimate for 1985 farm assets has been revised down to \$755-\$805 billion, and is expected to fall to \$725-\$775 billion in 1986. Non-real estate assets are also projected to fall, but only slightly, with most of the decline coming from reductions in the value of crops stored by farmers, and in the number and value of farm equipment and motor vehicles on farms.

Farm Debt Getting Smaller, Net Worth Still Falling

Total farm debt outstanding is expected to register a small decline in 1986 and range from \$194 to \$201 billion. Both real estate and non-real estate debt (excluding CCC loans) are forecast to decline. Real estate debt is expected to fall for the third consecutive year, as farmers concentrate more on loan repayments than on land acquisition. Non-real estate debt (excluding CCC loans) is forecast to decline somewhat as reductions in acres planted, input prices, and capital expenditures lessen the external capital requirements of many farmers.

Leasing: Cost Control For Some Farms

Depressed economic conditions in agriculture have precipitated a 38-percent decline in U.S. farm machinery spending, from \$11.7 billion in 1979 to \$7.3 billion in 1985. Farmers have replaced aging machinery at a much slower rate than before. Meanwhile, their leasing expenditures have increased from about \$300 million in 1979 to almost \$450 million in 1984.

Leasing allows financially stressed farmers the full-time use of machinery without having to purchase it. Across all sales classes, farmers who lease generally have higher debt-to-asset ratios.

There are two general types of leases: operating and financial. Operating leases are short term; rent is paid on an hourly, daily, or weekly basis.

A short commitment on an operating lease can help farms facing cash-flow problems and income uncertainty. By contrast, on purchased machinery financed by a bank, farmers must make regular payments, regardless of how much they use the equipment. Operating leases therefore entail less risk to a farmer.

Financial Leases Have

Tax Benefits for Leasing Farmer

Financial leases obligate the farmer to make payments during the entire lease term. Nevertheless, these leases can provide an option for securing use of production machinery for farmers struggling with low incomes, cash shortages, high debt, or declining land values.

How Returns & Debts Vary for Farms That Use Leased Equipment

Farms	Rate of return on assets	Debt-to-asset ratio
	Percent	
Leased equipment	4.7	50
Purchased equipment	2.4	35

Source: 1984 Farm Costs and Returns Survey.

For example, the current tax laws allow tax benefits from machinery purchase to be transferred implicitly from the machinery owner to the machinery leaser through either cash rebates or lower lease payments. The leaser thus can receive the benefit of the investment tax credit and accelerated depreciation deductions on machinery purchased by others.

Financial leases have another advantage. High debt-to-asset ratios reduce many farmers' eligibility for loans, and additional debt obligations can strain their credit reserves. However, the outstanding balance owed on a financial lease does not appear on a farmer's balance sheet as a liability, because the farmer does not own the asset during the lease term. Instead, lease payments are counted as simple cash expenses and affect only the income statement. Therefore, the lease transaction does not further weaken an already highly leveraged farmer's ability to get additional credit.

Another advantage is that financial lease payments made in advance can be lower than the downpayment on an

equivalent loan. Thus they impose less strain on the farmer's cash flow during the first year the leased equipment is used.

Leasing May Have Lower

Minimum Requirements for Collateral
In case of default by a leasing farmer, a machine owner has a greater likelihood of reclaiming it without a lengthy court battle than a lender has. Thus, owners who plan to lease out equipment may require much lower collateral than a lender requires on a loan purchase. Consequently, farmers with declining land values and debt problems may more easily qualify for a lease than for a loan.

Many large farms use big, specialized equipment with limited resale potential. The machine's value will decline rapidly during the years of use. If the machine's market value falls below its book value, the equipment owner sustains a capital loss. A financial lease, which does not obligate the farmer to purchase the equipment at the end of the lease term, protects the producer from this loss.

Tax Reforms May Negate

Some Advantages of Financial Leasing

Tax reforms now being proposed could affect the attractiveness of financial leases by abolishing the investment tax credit and lengthening the schedule of depreciation allowed. These changes will prevent equipment owners from using these tax benefits and from offering attractive lease terms to farmers with low taxable incomes. Farmers faced with high debt-to-asset ratios, declining land values, and cash flow problems may continue to lease equipment—but the cost may go higher. (Bill Serletis (202) 786-1804)

Production Expenses

Item	1982	1983	1984	1985P	1986F
	\$ billion				
Farm origin	51.5	53.1	55.4	51-55	79-55
Manufactured	22.2	21.3	23.1	21-25	17-21
Interest	21.8	21.4	21.1	19-21	16-20
Other					
operating 1/	28.2	28.0	29.6	28-30	27-31
Other					
overhead 2/	55.5	51.8	52.2	50-52	27-31
Total expenses	136.9	135.6	139.5	135-135	128-128

1/ Includes repair and operation, hired labor, machine hire, cotton ginning, crop insurance, and other miscellaneous operating expenses.

2/ Includes capital consumption, property taxes, and net rent to nonoperating landlords.

P=preliminary. F=forecast.

Despite lower expected farm debt, total net worth is forecast to decline for the sixth straight year. The current forecast for farm equity (excluding households) is \$525-\$585 billion, down from the \$555-\$605 billion likely for 1985.

The debt-to-asset ratio has risen steadily since 1978. A ratio between 24 and 28 percent is forecast for 1986, compared with the 25 to 27 percent likely for 1985. Debt-to-equity ratios are expected to increase.

Two important gauges of profitability are the rates of return to equity and to assets. Return on assets measures the returns generated from both debt and

equity capital invested in the farm operation, while return on equity measures the returns exclusively from equity capital. Interest paid is the return to debt capital. Therefore, if the rate of return on assets is less than the interest rate, interest payments will reduce residual income available as a return to equity, and debt use will have reduced the rate of return to farmers' equity.

Since 1980, debt financing and increased interest payments have reduced returns, and they will likely continue to do so through 1986, despite anticipated lower interest payments. The margin between the rates of return on assets and on equity is expected to narrow a bit in 1986. The

larger margins that occurred in recent years were mainly due to large real capital losses. Although real capital losses are expected to continue in 1986, they will likely slow somewhat.

The rate of return to equity is forecast to remain about even with 1985. Although residual income to equity is expected to fall by about a tenth, equity values are also predicted to decline, leaving the ratio unchanged. After adjusting for real capital gains, the return-to-equity ratio is expected to improve substantially over 1985, but it will still likely be negative.

The rate of return to assets from income will probably fall slightly in 1986. However, adjustments for real capital gains will cause the total return on assets to improve. Nevertheless, like returns to equity, returns on assets will remain negative. [Matthew Rea and Gary Lucier (202) 786-1809]

Percentages Revised on FCS Problem Loans

The May *Agricultural Outlook* carried a map showing the percentage of nonperforming loans in each Farm Credit System district. Revised data in the accompanying table substantially alter the proportions of nonperforming loans in a number of districts.

Percentage of FCS Problem Loans*

FCS District	Short-term	Long-term
		Percent
Baltimore, MD	4	2
Columbia, SC	6	4
Jackson, MS	11	4
Louisville, KY	6	11
Omaha, NE	19	8
Sacramento, CA	9	5
St. Louis, MO	9	8
St. Paul, MN	10	7
Springfield, MA	2	2
Spokane, WA	7	5
Texas	5	2
Wichita, KS	13	10

*Unsecured loans past due 90 days or more, and high-risk restructured loans.



World Agriculture and Trade

IN AGRICULTURAL TRADE, DOLLAR REMAINS STRONG

The recent decline in the U.S. dollar, particularly the spectacular fall against the Japanese yen, is raising expectations for improved U.S. agricultural exports. However, the yen-dollar exchange rate is an incomplete indicator of how the dollar has moved against all currencies important to U.S. agricultural trade. An exchange-rate index weighted by U.S. farm exports shows that the dollar remains strong against many currencies of agricultural importance (see table 27 in back of issue). This potent dollar continues to hurt U.S. sales.

Exchange Rate Indexes Vary In Several Ways

Changes in the dollar exchange rate can be measured against either one or several currencies. Measuring against several currencies is typically done with an index. Indexes can differ by how many currencies are included, how important each one is, whether inflation is taken into account, and what base period is chosen to show the typical relationship between the currencies.

The Federal Reserve's weighted-average exchange value index measures movements in the dollar against currencies from the largest market economies (called the G-10 countries)—Germany, Japan, France, the United

Kingdom, Canada, Italy, the Netherlands, Belgium, and Sweden—as well as Switzerland. These nations' currencies dominate world financial markets, partly because they are responsible for providing standby credit lines to the International Monetary Fund (IMF).

By contrast, the index of the agricultural trade-weighted dollar published in *Agricultural Outlook* measures dollar changes against currencies important to total U.S. agricultural trade (see table 27 in the back of this issue). The agriculture index includes 38 currencies from the developed and developing countries that comprise major markets for U.S. agricultural exports.

These countries include Argentina, Australia, Brazil, India, Indonesia, Kenya, Mexico, Nigeria, Pakistan, the Philippines, South Korea, Spain, and Taiwan, in addition to the G-10 countries (except Sweden). However, several major markets—the USSR, Eastern European countries, and China—have currencies that are not traded internationally and therefore, are not included in this index.

Index Weighting Makes Big Difference

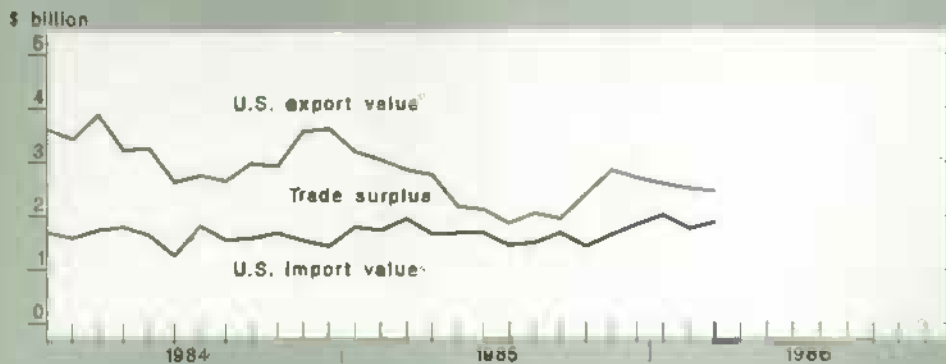
An important difference between the Fed's G-10 index and the agriculture index is the weight assigned to each currency. For example, while both indexes include the German mark, the Fed index reflects the mark's importance in world financial markets with a weight of more than 20 percent. On the other hand, the agriculture index reflects West Germany's share of U.S. agricultural trade—giving it a weight of not quite 10 percent.

Conversely, the Fed index uses a Japanese yen weight under 15 percent, reflecting limited use of the yen as a world financial currency. But the agriculture index attaches a weight of over 20 percent to the yen, reflecting Japan's importance as the largest single-country market for U.S. farmers.

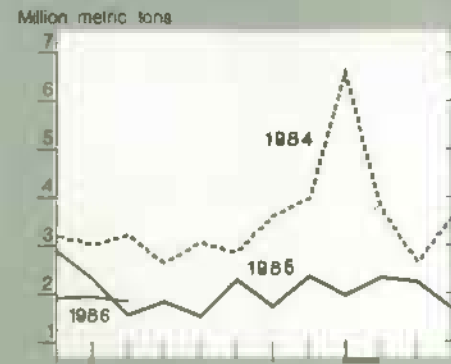
Dollar indexes—such as the Fed index—are generally presented in nominal terms. However, a deflated or real agriculture index was devised to deflate the nominal index by the ratio of annual U.S. price changes to price changes in other countries. The Consumer Price Index deflator reflects domestic price changes in both traded

U.S. Agricultural Trade Indicators

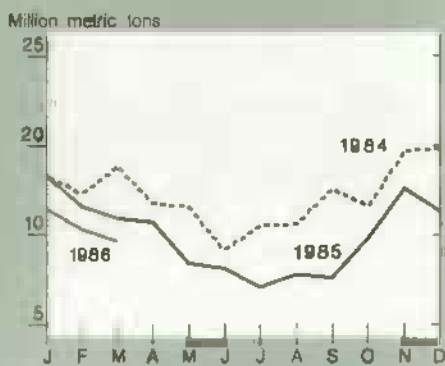
U.S. agricultural trade balance



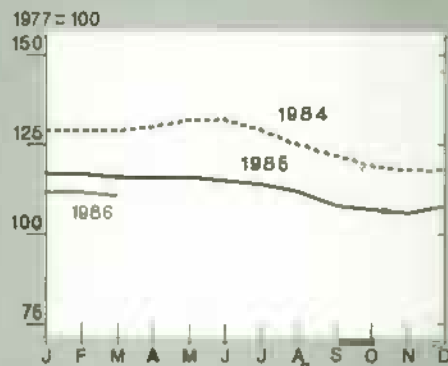
U.S. wheat exports



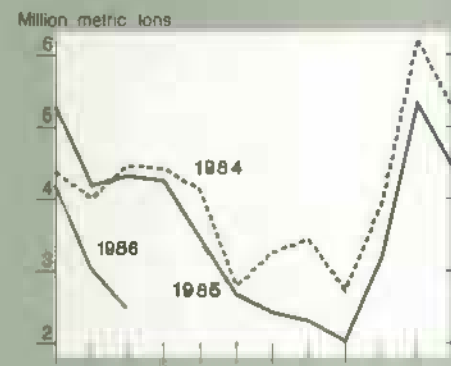
Export volume



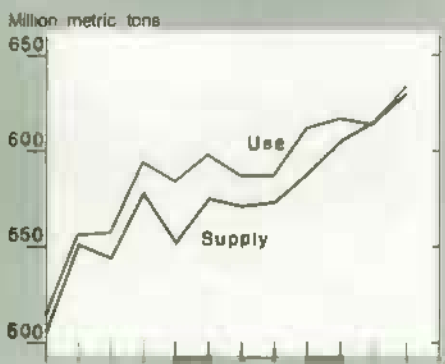
Export prices



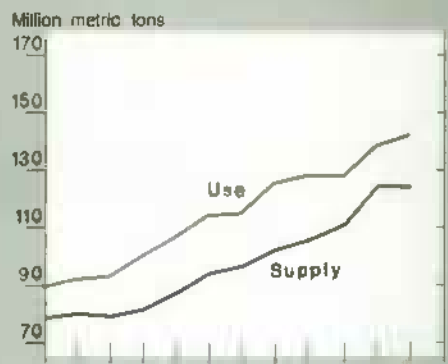
U.S. corn exports



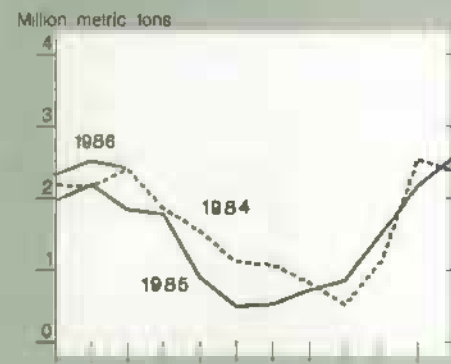
Foreign supply & use of coarse grains



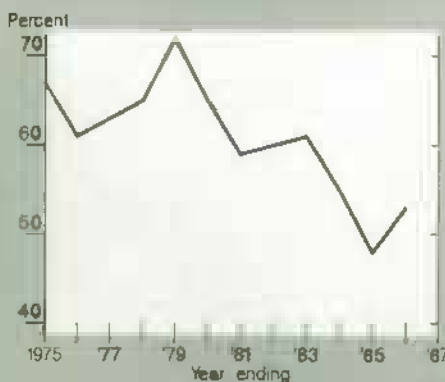
Foreign supply & use of oilseeds



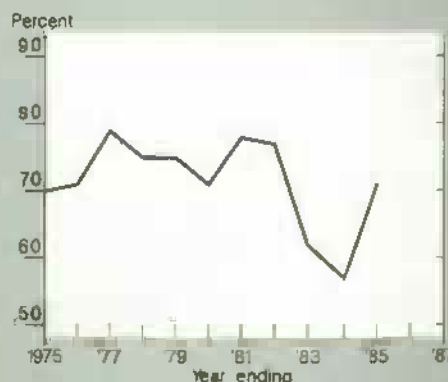
U.S. soybean exports



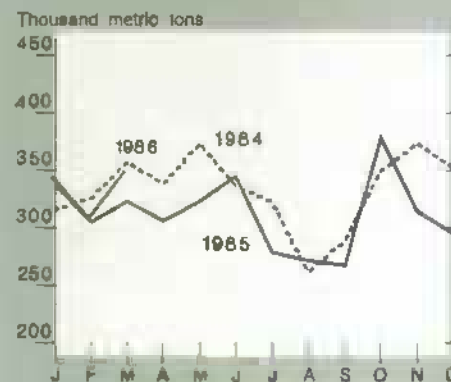
U.S. share of world coarse grains exports



U.S. share of world oilseed exports

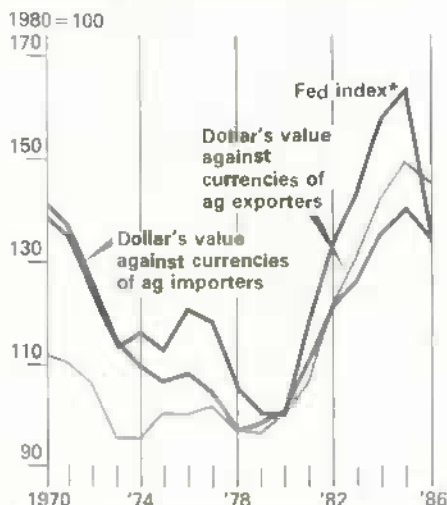


U.S. fruit & vegetable exports



Wheat, corn, soybean, and cotton exchange rates and export unit values are now included in the U.S. Agricultural Trade tables at the back of this issue

For Agriculture, Fed Index Is Poor Measure of Dollar Exchange Rates



*Index of U.S. dollar exchange rates reported by the Federal Reserve Board.

and nontraded goods (such as construction or local services). Therefore, fluctuations in the agriculture index are often moderated.

To Many Countries, Dollar's Value—And U.S. Ag Prices—Remain High
Dividing the agriculture index into two separate indexes provides an interesting view of several differences among country groups. An index of U.S. dollar exchange rates with major agricultural exporters (Canada, Australia, France, Argentina, Brazil, and South Africa) closely followed the total agriculture index through 1985. However, most competitor currencies have not strengthened against the dollar in 1986 as the financial currencies in the Fed index have, or as much as the total agriculture index, which includes the Fed currencies. This means the exporters' prices maintain about the same relationship to the dollar as before.

Similarly, an index of U.S. exchange rates with the currencies of agricultural importers strengthened from 1980 through 1985. Against the developing-country currencies in the importer index, the dollar remains strong. Many of these countries have large dollar debts which usurp dollar export earnings. Higher inflation rates in these countries also continue to weaken their currencies. In addition, some governments have actually pegged their currency to the dollar, creating a fixed exchange rate.

Consequently, while the dollar is falling rapidly against major financial currencies, most developing-country importers still see the dollar as fairly strong in terms of their currencies.

Furthermore, the dramatic dollar decline against the industrial country currencies has not extended to major U.S. competitors in agricultural trade markets. While the nominal commercial quotes for the dollar fell 29 percent against both the Japanese yen and the German mark between February 1985 and February 1986, the dollar rose 4.5 percent against the Canadian and Australian dollars, more than 6 percent against the South Korean won, nearly 12 percent against the Philippine peso, and over 100 percent against the Mexican peso.

Thus, although the rapid fall of the dollar on world financial markets is indeed lowering dollar prices in foreign markets, the extent of the decline vis-a-vis U.S. agricultural exports is substantially less. For most U.S. agricultural importers other than Japan and Germany, the U.S. dollar is still strong. (Edward Wilson (202) 786-1688)

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Western Hemisphere	June 9
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Sugar & Sweetener Yearbook	June 13
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Agricultural Outlook	June 17
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General Economy

EXPANSION CONTINUING

Much like the "little engine that could," the current economic expansion is chugging its way into its 43rd uninterrupted month, making it the second longest peacetime expansion in U.S. history. The expansion has advanced in fits and starts, however, and growth is uneven across sectors. For example, real GNP grew only 2.2 percent in 1985, in contrast to the 6.6-percent rate in 1984. Employment in services has grown 18 percent since the last business cycle trough (November 1982), compared with only 7-percent growth in manufacturing.

Partly because this expansion is so uneven, there is considerable room left for further improvement in some sectors, increasing the likelihood that growth will continue. However, because some sectors are weak, an unforeseen development, such as a reversal in oil prices, could seriously hurt them and have a major impact on overall growth.

Where the Economy Is Booming

The brightest spot in the U.S. economy is residential construction, which has been spurred by the declines in mortgage rates. Since November 1982, rates have fallen from near 14 percent to about 10.5. In the same period, residential construction has increased in 1982 dollars from \$100 to \$180 billion, and employment in construction has jumped about 70 percent.

Industries related to construction are also growing rapidly. Monthly lumber production, for example, has risen about 18 percent since the last business trough, and monthly brick production has risen 25 percent. As the effects of increased construction continue to spread through the economy, even more increases should occur in overall employment and production.

Why Interest Rates Are Falling

Interest rates have been falling for three primary reasons. First, lower rates of inflation have brought down expectations of future inflation, helping to lower interest rates. The abrupt decline in oil prices has accelerated the downward adjustment considerably.

Second, the Federal Reserve has pursued a more accommodative monetary policy over the last 2 years. With more money to lend, banks and other financial institutions have reduced their rates to encourage borrowing.

Finally, financial markets have interpreted passage of the Gramm-Rudman-Hollings bill as a signal that the large Federal deficit will be reduced substantially. Such a reduction would in turn shrink future Government credit demands, easing pressure on interest rates, especially longer term rates.

Aside from construction and its related industries, trade and services have been leading the economy in employment gains. From the trough in 1982, the number of employees in the private sector has risen by about 10 million workers—about 3.8 million in services, 3.5 million in wholesale and retail trade, and about 800,000 in finance, insurance, and real estate.

Where the Economy Is Soft

In contrast to the construction and service industries, the manufacturing sector has not fared very well, especially since mid-1984. Industrial production has risen 25 percent since November 1982, but all of that increase occurred in 1983 and early 1984. Since mid-1984 the index has barely moved.

Manufacturing employment tells the same story. Of the 10 million jobs gained in the last 43 months, only 1.2 million were added in manufacturing, and the number of manufacturing employees has declined by about 200,000 since mid-1984.

Much of the growth in demand for manufactured goods has been met by imports, not domestically produced

items. In real terms, industrial durable goods imports rose nearly 60 percent from fourth-quarter 1982 to the end of 1985, and capital goods imports (excluding autos) more than doubled in that period. Excluding autos, consumer durable goods imports increased by \$17 billion, so imports took about 40 percent of new consumer purchases in that category.

One of the major reasons for the shift to imported goods was, of course, the dollar's runup in 1983 and 1984. The higher value of the dollar made foreign goods less expensive than U.S. goods, providing an incentive for U.S. consumers and producers to "buy foreign" and foreign consumers and producers to "buy domestic." The dollar has fallen about 30 percent since its peak in February 1985, and the reversal should turn the incentives back in the direction of buying U.S. goods, potentially helping the manufacturing sector.

Why Employment Distribution Is Important

A turnaround in manufacturing employment could be particularly important for agriculture, since manufacturing jobs pay more on average than service or retail trade jobs. Adding one worker in manufacturing rather than in services adds more to personal income, an important determinant of domestic food purchases.

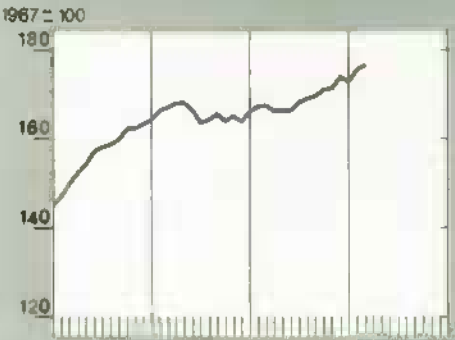
A boost in personal income from stronger manufacturing employment growth could be substantial. In 1985, personal income was about \$3.3 trillion and employment grew by about 3 million workers. Wage and salary payments per full-time-equivalent employee in 1984 (the latest year for which data are available) were \$23,237 in manufacturing and \$17,784 in services.

Using these figures, adding 3 million full-time workers in manufacturing would raise personal income about \$16 billion more than adding the same number of service workers and would speed personal income growth half a percentage point. Thus, if the economy adds about the same number of total workers in 1986 as in 1985, personal income could be 0.5 percent higher or lower depending on where the jobs are added.

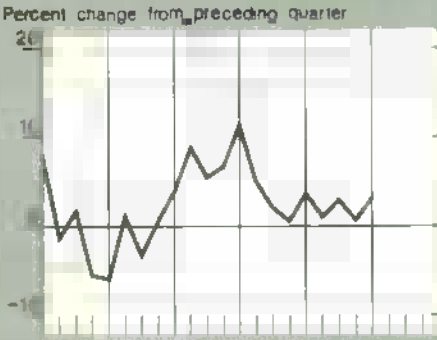
When the distribution of the types of service jobs is considered, the potential

General Economic Indicators

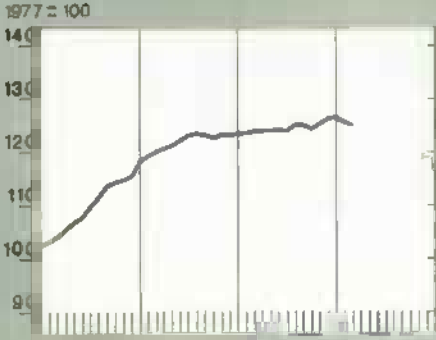
Composite leading economic indicators



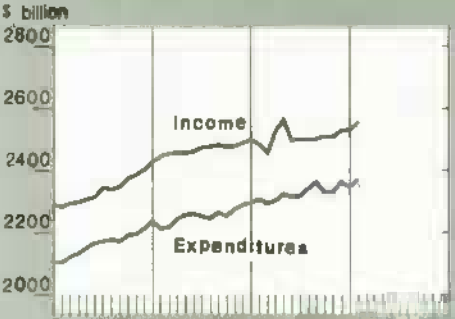
Gross national product¹



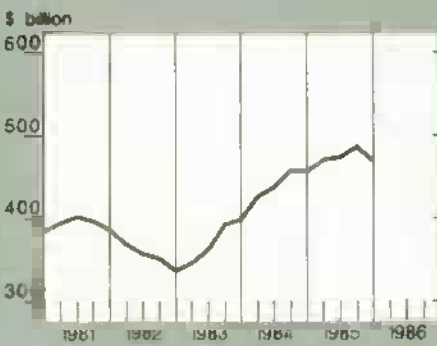
Industrial production



Disposable income and consumption expenditures²



Nonresidential fixed investment²



Manufacturers' durable goods orders³



Consumer price index



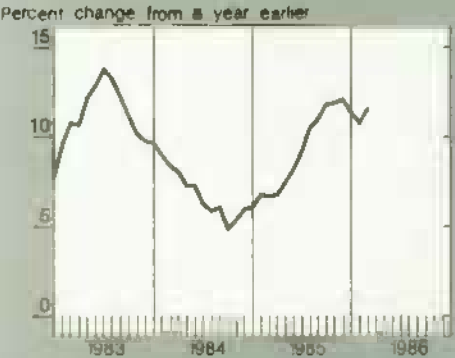
Inventory/sales⁴



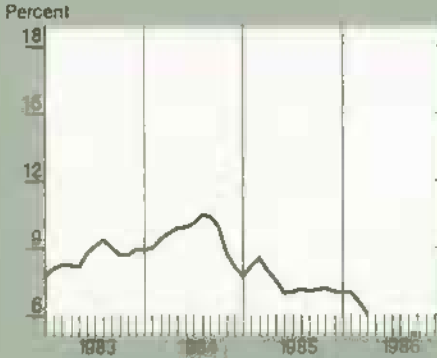
Unemployment rate⁵



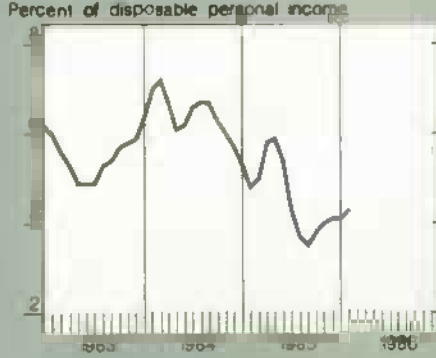
Money supply (M1)



3-month Treasury bill rate



Savings rate⁶



¹Percent change from previous quarter in 1982 dollars. Seasonally adjusted annual rates. ²Billions of 1982 dollars seasonally adjusted at annual rates. ³Nominal dollars. ⁴Manufacturing and trade, seasonally adjusted, based on 1982 dollar. ⁵Seasonally adjusted. ⁶Calculated from disposition of personal income in 1982 dollars, seasonally adjusted at annual rates.

Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, and the Board of Governors of the Federal Reserve System.

difference in personal income becomes greater than 0.5 percent. The service job category can be divided neatly into two groups: high wage and low wage. While there are some jobs in the high-wage group—legal services, motion pictures, and some other professional services—most service jobs pay low wages. If the atypical high-paying service jobs are excluded, wage and salary payments average the pay level found in retail trade, \$13,206 a year.

Adding 3 million workers to manufacturing rather than to retail trade and the more typical low-paying service jobs would add about \$31 billion to personal income and about a full percentage point to the personal income growth rate. The distribution of employment, then, can significantly affect the size of personal income and the demand for farm products.

What the Rest of 1986 Could Bring
The events of the first half of 1986 have set the stage for robust growth in the second half. Lower interest rates, very low inflation, and an expected turnaround in the net export deficit all point to faster real growth and a somewhat smaller unemployment rate.

Inflation in the second half should return to the 3-4 percent range, as lower oil prices finish working their way through the stages of production. In light of a faster growing economy and a return to inflation of 3 to 4 percent, interest rates should stabilize and possibly even rise a little from their current levels.

An important factor in this outlook is the expectation that the net U.S. export deficit will decline the rest of the year. If the deficit remains near its first-quarter level through 1986, as much as 1 percentage point could be shaved off the real growth rate for the rest of 1986.

Another important variable is the size of the Federal deficit. The most recent projection for fiscal 1986 is slightly above \$200 billion. If the President and Congress attempt to meet the Gramm-Rudman-Hollings fiscal 1987 target of \$144 billion, Government deficits will have to be cut about \$50 billion. If the economy is not accelerating in the last half of the year—for example, because of a worse-than-anticipated foreign trade performance—the cut could substantially reduce real growth and employment.

What This Means for Agriculture
From a macroeconomic perspective, agriculture could gain. Farmers' interest costs should continue to moderate this year if rates for agriculture reflect the declines seen by the rest of the economy. Lower oil prices have substantially reduced the cost of farm fuels.

At the same time, a faster growing economy, with solid gains in manufacturing employment, offers potential increases in the domestic demand for food and clothing. Barring unforeseen circumstances, this combination of falling costs and steadily rising domestic demand should provide higher net income than would otherwise occur for farmers in 1986.

The export picture is not so clear. The value of the dollar has not fallen as much in relation to the currencies of agricultural export-competing and major agricultural importing countries as it has against world currencies in general. Consequently, the falling dollar alone will not cause a surge in export demand for farm products (see the World Agriculture & Trade department). (Ralph Monaco (202) 786-1283)

Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the July *Agricultural Outlook* comes off press.

June

- 2 Poultry Slaughter
- 3 Minn.-Wis. Mfg. Milk Final, 1983-85
- 4 Dairy Products
- 6 Celery
- 9 Vegetables Vegetables-Annual
- 10 Crop Production
- 12 Turkey Hatchery
- 13 Milk Production
- 16 Cattle on Feed
- 20 Catfish
Vegetables
- 23 Hogs & Pigs
Livestock Slaughter
Cold Storage
- 24 Eggs, Chickens, & Turkeys
Farm Production
Expenditures—Summary
- 27 Peanut Stocks & Processing
Grain Stocks
- 30 Egg Products
Agricultural Prices—Monthly
Agricultural Prices—Annual



Inputs

FERTILIZER APPLICATION RATES: UP OR DOWN?

American farmers applied over 21 million tons of fertilizer in 1985. The two major determinants of total fertilizer use, crop acres planted and the per-acre fertilization rate, are influenced by farm programs and a number of economic and agronomic considerations.

Farm programs, because they often affect acreage planted, can trigger large short-term changes in fertilizer use. For example, the decline in planted acres during 1983's PIK program dropped total fertilizer use about 16 percent from a year earlier. But, the impacts of farm programs on fertilizer use go beyond simple reductions in crop acreage.

Typically, when farm programs are put into effect, lower yielding, less intensively fertilized acres are the ones idled, leaving the highly fertilized acres in production. Also, farm program participants face less commodity price uncertainty, so they may partially offset acreage cuts by applying more fertilizer to the land remaining in production. But, this is not always the case because of the diverse set of factors affecting farmers' fertilization decisions.

Many Factors Influence Fertilization Rates

Soil and tissue testing are commonly used to assist farmers in making per-acre fertilization rates decisions, which are also determined by a number of other factors:

- the price of fertilizer relative to the expected crop price;
- the availability and cost of land, credit, and water;
- soil type;
- the amount of nutrients already in the soil;
- the crop planted and crop rotations;
- weather.

Over the long run, such factors as seed variety, timing and placement of fertilizer applications, and tillage systems and pest management practices which increase yields also may encourage shifts in application rates.

Application rates increased rapidly in the 1960's, especially for corn, but growth has slowed since then. Although higher yielding crop varieties, more irrigated acres, and improved cultural practices have increased crop yields and created additional demand for fertilizer, other factors have slowed the growth in fertilization rates.

The increase in yield from an additional application of fertilizer is generally smaller than the increase from an initial application. In some cases, application rates have reached the point where extra fertilizer produces only small increases in yields. In addition, the jump in energy prices during 1972-74 and 1979-82 increased the cost of producing fertilizer, especially nitrogen, and prices increased significantly.

Crop and Fertilizer Prices Often Move Together

Crop-fertilizer price ratios combine two key economic factors which can influence application rates. However, crop and fertilizer prices often move together and thereby offset their respective influences on application rates. Lower crop prices, especially for corn, lead to lower fertilizer prices as farmers demand less fertilizer and dealers then lower prices to stimulate

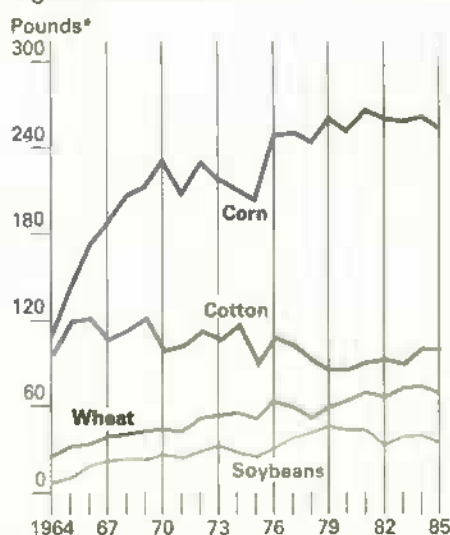
Supply and Use of Fertilizer

	1/ 1970-74	1975-79	1980	1981	1982	1983	1984	1985	1986F
Production (mil. nut. tons) 2/	20.94	24.88	29.25	29.74	25.46	22.58	24.53	26.47	23.37
Imports (mil. nut. tons)	5.32	6.44	8.21	8.19	7.68	7.41	9.41	9.35	9.44
Ag. consumption (mil. nut. tons)	17.60	20.70	23.1	23.70	21.40	18.10	21.80	21.70	20.82
Application rates									
Wheat									
Acres fertilized (percent)	63	65	67	70	70	73	76	77	77
Plant nut. applied (pounds)	49	57	63	68	65	72	73	69	71
Corn									
Acres fertilized (percent)	95	96	96	97	97	96	97	98	98
Plant nut. applied (pounds)	219	241	252	265	260	258	262	254	256
Cotton									
Acres fertilized (percent)	76	72	71	75	71	68	77	76	76
Plant nut. applied (pounds)	109	97	87	92	94	91	102	102	100
Soybeans									
Acres fertilized (percent)	30	34	37	36	30	33	34	32	33
Plant nut. applied (pounds)	30	38	45	46	34	40	40	36	37
Total, four crops, average pounds of plant nutrient applied									
	109	117	120	126	119	114	127	127	126
Exports	3.18	5.26	7.62	8.38	6.86	6.34	6.91	9.32	6.84

1/ Calendar years are used for population; years begin July 1 for fertilizer. 2/ Some production for industrial purposes. F = forecast.

Source: Agricultural Resources: Inputs Outlook and Situation Report, various issues.

Fertilizer Application Rates Highest on Corn



*Rates for each crop are based on per-acre application of nitrogen, phosphates, and potash weighted by the respective percent of acres treated with each nutrient.

use. Conversely, as crop acres and fertilizer use expand under the influence of higher crop prices, there is upward pressure on fertilizer prices.

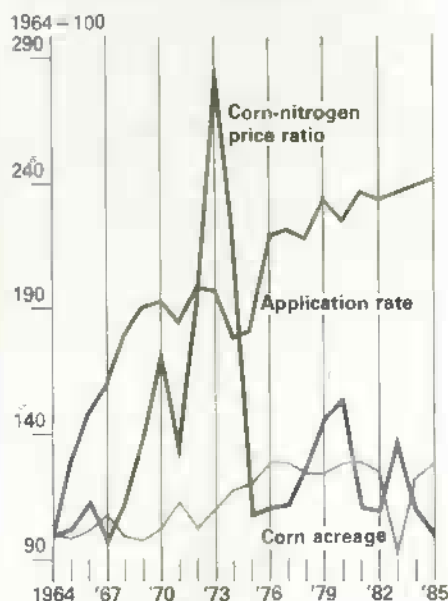
Nitrogen use on corn appears most responsive to economic factors. Nitrogen application rates on corn generally rise or fall directly with the corn-nitrogen price ratio.

However, in the case of phosphate, this relationship is not well defined. Declining use on corn cannot be directly tied to the corn-phosphate price relationship. Other factors are involved. For example, in certain corn-growing areas, heavy phosphate fertilization on corn land has built up a reserve of phosphatic nutrients. Consequently, for a limited time, farmers can use what phosphate is in the soil to maintain corn yields. Also, cost pressure on corn producers since 1983 has accelerated the trend toward applying less phosphate fertilizer.

Because of the diversity of other factors involved, the corn-fertilizer price ratio and fertilizer application rates have shown some inconsistencies. For example, in 1985, the ratio pointed to a decline in nitrogen application, but rates increased as farmers responded to spring soil moisture levels that portended high corn yields.

Fertilizer application rates on other crops have exhibited only weak responses to the crop-fertilizer price ratio. Historically, wheat fertilizer application rates have generally risen irrespective of declines in the wheat-fertilizer price ratio. This continues today because of new, higher yielding wheat varieties that require larger per-acre fertilizer applications.

Nitrogen Application Rates
Influenced by Corn-Nitrogen
Price Ratio and Acres Planted



In the case of cotton, regional shifts in production affect national average application rates. Since 1981, cotton production has shifted away from the Southern Plains to higher yielding areas of the West and Delta States and to potash-deficient soils east of the Mississippi River. This change has pushed up average nitrogen and potash application rates.

Total Fertilizer Use Down in 1986

Total fertilizer use in 1986 will fall, since planted acreage will be down about 5 percent from 1985. With record commodity program participation rates, the area idled will increase from about 30 million acres in 1985 to over 40 million. According to the *Prospective Plantings* report and current signup information, planted corn acreage will likely fall 5-6 million acres. Since corn accounts for the greatest share of fertilizer applied to field crops, the decline in corn acreage will account for a large share of the projected 1-million-ton decrease in fertilizer consumption.

Other Signals Are Mixed

This year, mixed signals to farmers are affecting fertilizer application rates. All major crop prices are expected to be below 1985. Season-average prices may tumble at rates from 20 percent for corn and wheat to about 1 percent for soybeans.

However, a number of other factors suggest constant or increased application rates. Given the long tradition of attempting to increase yields, the idea of reducing input use and lowering yield goals initially may not appeal to some farmers. Also, fertilizer prices have declined nearly 10 percent from last spring because of sluggish demand and, in some cases, rising inventories.

Furthermore, target prices, which determine deficiency payments through the commodity programs, have been frozen at 1985 levels. Between the deficiency payments from the 1985 crop and the advance deficiency payments for the 1986 crop, most producers will have adequate cash on hand to purchase fertilizer. Also, reduced plantings and falling energy prices and interest rates should help alleviate some farmers' cash or credit problems.

In addition, average application rates may increase this year as marginal, less intensively fertilized cropland is withdrawn from production due to the increased acreage conservation reserve and the acreage reduction program.

Finally, extra fertilizer may be warranted if technological improvements such as hybrid wheat permit increased yields without significant cost increases. While no breakthroughs are expected in 1986, in the past, adoption of new technology has generally required additional fertilizer to reach higher yields. [Paul Andrienas, Harry Vroomen (202) 786-1456]

AGRICULTURAL POLICY

Dairy Production Termination Program.—USDA accepted 13,988 bids, which will result in a reduction of 12.28 billion pounds of milk during the 18-month program. The maximum bid accepted was \$22.50 per cwt. Payments to dairy producers who had their bids accepted are estimated at \$1.827 billion, to be paid out by 1991. The dairy herd disposal will be conducted during three periods; April 1-August 31; September 1-February 28, 1987; March 1-August 1, 1987.

Red meat buyout.—USDA is purchasing 400 million pounds of red meat to offset the impact of the increased dairy slaughter. Purchases will be in addition to normal buying, for distribution to the school lunch program and other domestic feeding programs.

The Department began buying additional canned beef and ground beef in April. Purchases will continue to be in proportion to the estimated slaughter for each disposal period. Of the 400 million pounds, 200 million will be donated to domestic nonprofit charitable institutions for the needy, elderly, and children. The remaining 200 million pounds have been purchased by Brazil.

Branding instructions.—The original instructions called for hot branding on the jaws of cattle to be slaughtered or exported under terms of the Dairy Termination Program. Amended instructions also allow for freeze branding.

Conservation reserve program.—USDA accepted bids for 838,480 acres of highly erodible cropland on 10,307 farms. The accepted bids ranged from \$5 to \$90 per acre, with an average of \$41.82. Annual rental payments will be made after October 1 of each year. A second signup began May 5; the first signup period was March 3-14.

1986 cotton program.—On April 24, USDA announced that it had determined a prevailing world market price of 33.62 cents per pound for SLM 1-1/16" (micronaire 3.5 through 4.9) cotton at average U.S. locations. The Department then chose "Plan A" from the two plans offered in the Food Security Act. The choice of Plan A means that cotton loan repayments in the 1986 crop year can be made at 80 percent of the loan rate for each quality of cotton and are fixed for the entire year. [Tom Fulton (202) 786-1780]



The Outlook for Farmland Values Is Still Clouded

U.S. farmland values fell 12 percent in 1985, continuing the downward trend that began in 1981. The U.S. average price per acre on February 1, 1986, was \$596, down from \$679 in April 1985 and the peak of \$823 in the early 1980's. The index of farmland values now stands only slightly above the 1978 mark. Real values, adjusted for inflation, have retreated to the levels of the early 1970's. After 4 years of falling nominal values, the question arises: Have farmland values finally bottomed out? The answer: It's probably too early to tell.

Twenty-five States experienced price declines of 10 percent or more in the past year, led by Minnesota, where values dropped 26 percent. Values in the Corn Belt and Northern Plains, which have sustained large losses, continued to decline, but at a lower rate than earlier.

Cash rents declined in almost all States. However, rents generally dropped less than values, so rent-to-value ratios increased.

The erosion of farmland values in the major agricultural States reflects the generally depressed farm economy, severe financial stress for farmers with large debts, and the cautious attitudes of some farm lenders. In addition, many prospective buyers appear to be waiting for still lower prices.

Russian Grain Sale in 1972 Helped Spark Boom

The roots of the current land market go back to the early 1970's. The Russian grain sale in 1972 marked the beginning of a period of rapidly rising world demand for U.S. farm products. As commodity prices rose during the

A Formula for Land Values, Land Earnings, and Interest Rates

A simple formula expresses the relationship between land values and expected land earnings and interest rates:

$$P_t = R_t / (i - g)$$

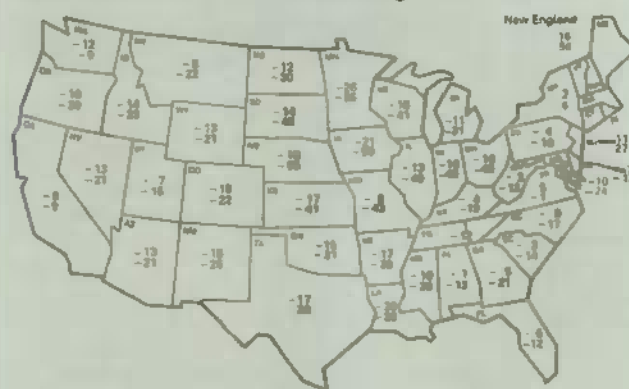
P_t is land price per acre in year t , R_t is land earnings or economic rent in year t , i is the real interest rate at which future returns to land are discounted, and g is the rate by which real returns to land are expected to grow annually.

Rearranging terms gives:

$$(R_t/P_t) = i - g$$

The formula states that, in a well-functioning market, land will be priced so that the current return on investment is equal to the discount rate minus expected trends in land earnings. Thus, in order to understand land prices, it is necessary to consider the joint effects of expectations about both land earnings and real interest rates.

Fall in Land Values Continued During 1985



Top Row: Change from 1985 to 1986
Bottom Row: Change from 1981 to 1985

Percent change in average value of farm real estate per acre.

mid-1970's, farm earnings increased dramatically. As a consequence, land prices rose rapidly and large amounts of previously idle cropland were brought into production.

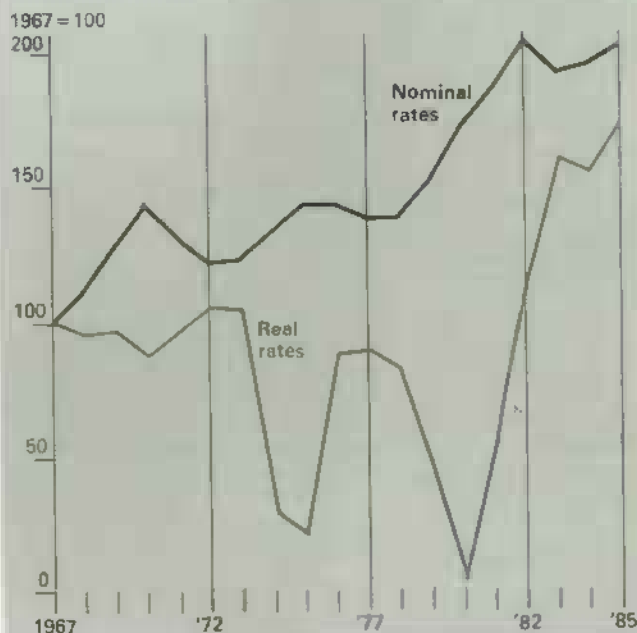
The boom in land prices was aided by the widespread availability of capital at very low, or even negative, real interest rates. High rates of inflation in the general economy made farmland a valuable inflation hedge and tax shelter. In addition, Government commodity programs substantially reduced the marketing risks associated with farming.

The expectations for continually increasing farmland earnings and inflation changed sharply in the 1980's. New macroeconomic policy, particularly monetary policy, led to a dramatic reversal in inflation rates and a substantial rise in real interest rates.

High real interest rates strengthened the value of the dollar in international markets, boosting U.S. prices overseas and contributing to the reduction in the volume and value of U.S. agricultural exports. Declining exports in turn led to surplus domestic stocks, lower commodity prices, and lower farm incomes.

The combination of high real interest rates and declining net farm income caused land prices to begin slipping in 1982. The lower land prices exacerbated farm financial problems brought on by low farm income. Lower land prices

Real Interest Rates in 1970's Encouraged Farmland Buying



reduced the value of loan collateral (land and buildings constitute 75 percent of all farm assets) and forced some farmers—especially those who had purchased land near peak prices—into foreclosure.

The Critical Factors:

Interest Rates & Expected Land Earnings

There are two primary determinants of agricultural land values—expected land earnings and interest rates. Land prices are inversely related to interest rates; for a given level of expected land earnings, higher interest rates will result in lower land prices. Conversely, an increase in the rate at which future land earnings are expected to grow will increase land prices.

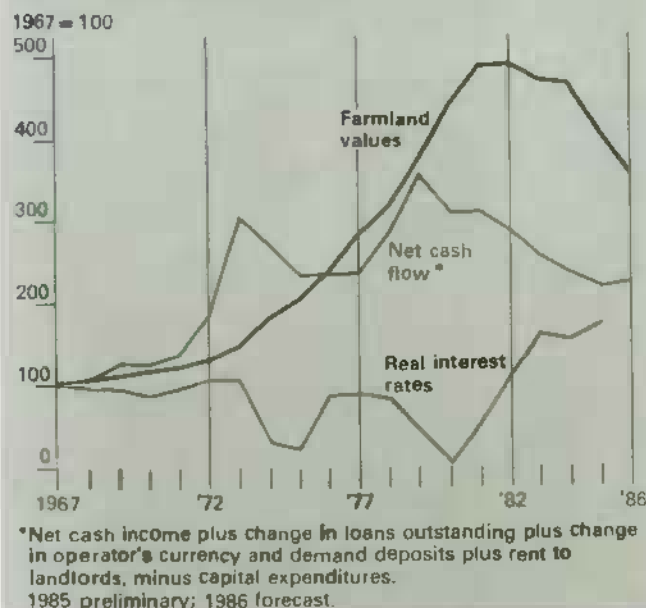
Land earnings.—Expectations about future returns to land cannot be directly observed, but economic studies suggest that buyers and sellers form expectations largely on the basis of current land earnings and past changes in earnings and land prices.

As an example of how expectations are formed, consider farm operators' net cash flow since 1967. In the 1960's and early 1970's, land prices and net cash flow were relatively stable and tended to move together. Net cash flow jumped sharply in 1973 and 1974, stabilized at about twice the 1967 level for the next 3 years, and increased again between 1978 and 1979.

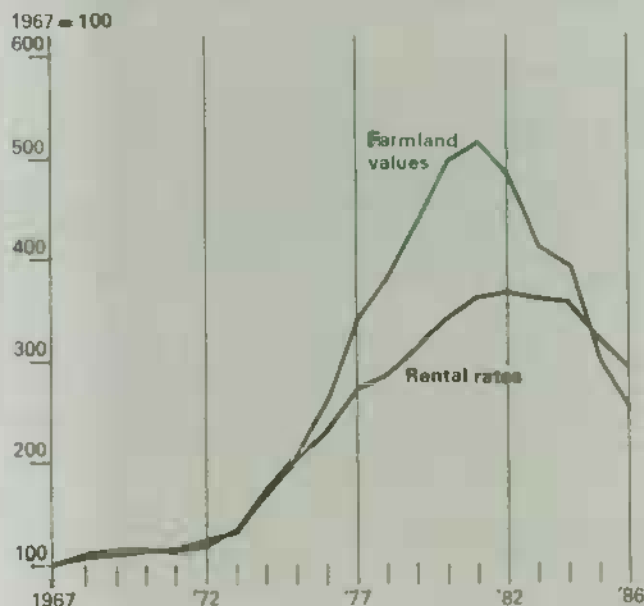
Net cash flow is a measure of funds available to farmers for operator income and real estate purchases. When net cash flow began to rise, land buyers and sellers apparently were at first cautious about continued growth. But, during the middle and late 1970's, rising expectations increasingly translated into higher land prices.

Land values continued to climb in 1980 and 1981, although net cash flow fell. Economic studies have found that changes in land prices generally lag changes in earnings.

Land Values Affected by Interest Rates and Net Cash Flow



Corn Belt Land Values Climbed Faster Than Rental Rates During 1975-81



This is reasonable, since buyers and sellers may not immediately recognize a downturn.

Interest rates.—Land prices have dropped sharply since 1982. To understand why, it is useful to look at real interest rates.

In nominal terms, mortgage rates ranged between 6 and 12 percent between 1967 and 1981. However, because of the very high rates of inflation (as measured by the Consumer Price Index), real mortgage rates were negative in 5 of these years and averaged only 1.3 percent annually for the whole period. This period of low real interest rates general-

ly coincided with the period of most rapid gains in land prices. Conversely, the steepest decline in land values occurred after the sharp increase in real interest rates in the early 1980's.

Cropland Rents.—The relationship between land earnings and land prices also can be seen in USDA data on cropland rental rates. Rental rates are another frequently used measure of land earnings. However, rents tend to be lagged indicators of land earnings, because in some cases they are based on multiyear contracts.

The relationships between cropland rents and land values in the Corn Belt and Northern Plains States are particularly instructive because agriculture in these regions is heavily dependent on export markets. As a consequence, both land prices and rents have been more volatile than in other U.S. regions.

Prior to 1973, cash rents and values in both regions were closely linked and relatively stable. Beginning in 1974-75, both values and rents increased sharply, but after 1975, values grew proportionately more. Again, this is evidence that land buyers and sellers were capitalizing expectations of increased land earnings into land prices.

In both regions, cropland prices have fallen relatively more than cash rents. This suggests that the rapid fall in cropland prices since 1981 or 1982 is partially related to the sharply higher post-1981 interest rates, and not entirely to the decline in land earnings.

Some Indicators Point One Way, Some the Other

Some respondents to USDA surveys believe that land values are at or near the bottom and may stabilize soon. Also, some recent quarterly surveys by State universities and Federal Reserve banks reflect a pattern of moderating declines or stabilizing land prices. But, it is difficult to determine if the market has indeed stopped falling. There are some indicators in both directions.

The factors indicating stabilizing land prices include the following:

- The relatively large decline in cropland values, compared with cash rents, has restored rent-to-value ratios close to their pre-1974 levels. This is important because it suggests that land prices have now adjusted for the incorrect expectations for future land earnings, interest rates, and inflation of the late 1970's.
- Many potential farmland investors have cash reserves and relatively low debt-to-equity ratios (three-fourths of farmland purchasers in 1985 were active or retired farmers). Depending on their current production costs and the economic outlook, current land prices may provide more attractive opportunities for such investors.
- Recent declines in long- and short-term interest rates enhance prospects for stabilizing land prices. For a prospective buyer, lower long-term (mortgage) rates reduce the income required to support given land prices.

Lower interest rates have also affected foreign exchange rates, reducing the value of the dollar, and increasing the possibility that the United States can export more

Average Farmland Values Per Acre, 1979-85

Region	1979	1980	1981	1982	1983	1984	1985	1986
Dollars per acre								
Northeast	1,112	1,269	1,365	1,364	1,343	1,414	1,390	1,413
Lake States	901	1,065	1,243	1,234	1,160	1,099	874	702
Corn Belt	1,412	1,643	1,776	1,642	1,462	1,414	1,055	902
Northern Plains	412	485	535	547	528	499	383	323
Appalachian	894	1,014	1,093	1,083	1,082	1,090	1,006	984
Southeast	844	1,005	1,126	1,095	1,095	1,094	1,042	996
Delta States	795	966	1,146	1,135	1,039	1,040	946	796
Southern Plains	611	472	510	576	574	614	635	529
Mountain States	231	284	308	323	314	319	286	248
Pacific States	867	1,037	1,243	1,346	1,357	1,361	1,223	1,105
U.S.	628	737	819	823	788	782	679	596
Percent change from previous year								
U.S.	+18	+17	+11	—	-4	-1	-13	-12

1/ February 1, 1979-81; April 1, 1982-85; and February 1, 1986.

farm commodities. Lower short-term rates reduce the cost of operating capital and thus reduce production costs and lift incomes. The stock market has strongly reacted to lower rates, as have residential housing markets. Other long-term investments such as farmland should also react positively.

- Passage of the Food Security Act of 1985, with target prices frozen for 2 years, gives farmers a more stable short-term planning environment.

But, the factors indicating further declines in farmland values include these:

- Although rent-to-value ratios are nearly in line with historical relationships, reported cash rents may continue to decline because of their lagged nature. This may be interpreted as bad news and further reduce farmer and landlord expectations.
- Lower interest rates and greater loanable funds have not been geographically uniform, especially for rural agricultural banks. Many farmers holding long-term, high-interest debt face insolvency. Financial institutions have acquired many farms through foreclosure, and much additional acreage is subject to foreclosure. The possibility that large amounts of this land could be offered for sale simultaneously worries bankers in agricultural areas, since such a land glut could lower prices further.
- The impact of the Graham-Rudman-Hollings Act on farm programs is uncertain; there is some concern that funding for the programs will shrink. Also, given the nation's need to deal with its deficit problems, agricultural commodity and credit programs may face further changes over the next several years. Historically, farm programs have legislated changes in the supply of cropland and the resulting benefits have been capitalized into land values. If benefits are reduced or eliminated, land values could decline further. [Robert Boxley (202) 786-1419]

How Lower Land Prices and Interest Rates Cut Land Payments

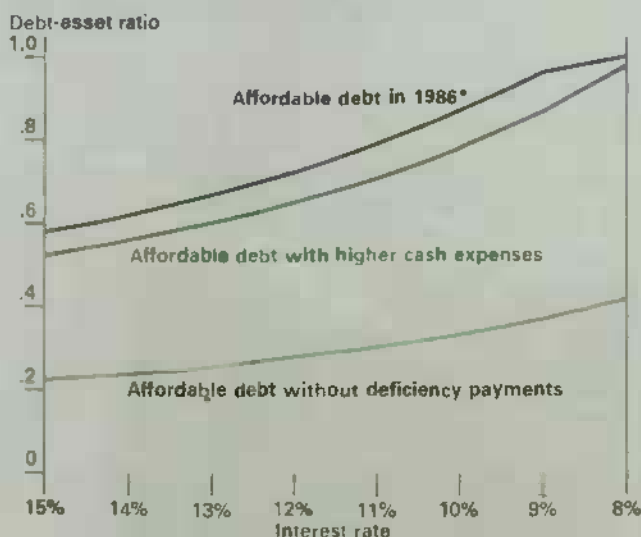
The 50- to 60-percent decline in land prices in several major Corn Belt States, combined with lower interest rates, could spell substantial savings for those now purchasing farm real estate. For example, annual payments for 160 acres of Illinois farmland purchased at 12 percent interest at a 1981 average statewide price of \$2,188 per acre would be \$46,869 (20-year amortization with equal payments). Based on a national average farm price for corn of \$2.50 per bushel in 1981/82, a yield of 117 bushels an acre would be needed just to meet those land payments.

However, the decline in Illinois land prices to \$1,143 per acre in early 1986, combined with 10-percent financing, would translate into an annual payment of \$21,481 for those buying the same land today. At the 1986/87 corn loan rate of \$1.92 a bushel, only 70 bushels per acre would be needed to meet the lower payments.

Cost declines for energy-based inputs, such as fuel and fertilizer, and projected record Government deficiency payments are other factors which could bolster land prices in 1986. Data from the 1984 *Farm Costs and Returns Survey* for 506 farms in Illinois, Indiana, Iowa, Minnesota, Nebraska, and Ohio indicate that the average corn-soybean farm in the Corn Belt consisted of 544 acres. Projected 1986 land values are \$541,000 per farm. Yields on those farms in 1984 averaged 114 bushels of corn per acre and 34 bushels of soybeans. Cost structure and production patterns on these farms were projected to 1986 in order to examine changes in farmers' ability to cover cash expenses from current income.

With a typical downpayment level, 30 percent, a new purchaser must meet interest payments on 70 percent of the cost of the land. Given average yields, crop prices, Government benefits, and operating expenses in 1984, a person who purchased an average Corn Belt farm at 12

As Interest Rates Go Down, Farmers Can Afford More Debt



*Maximum debt (as a percent of assets) on which farmers in accompanying example can meet interest payments in 1986, assuming lower cash expenses and rising deficiency payments.

percent interest could not have met the interest and operating expenses from returns of that farm (see accompanying table).

Although this year's cash receipts will probably be lower than in 1984, higher Government program benefits and lower operating expenses mean that even at 12-percent interest, a farmer could purchase land with a high level of debt financing and pay interest as well as operating expenses. Lower interest rates make the purchase more affordable.

However, if Government payments are subtracted from total receipts, the amount of debt a farmer could carry at 10 percent interest and still meet interest expenses would drop from over 80 percent of land values to less than 30 percent. The decline in cash production expenses due to lower fuel and chemical prices is increasing the amount of debt farmers can service by about 10 percentage points.

Assumptions and Caveats to the Analysis

In this example, land values are early 1986 statewide estimates, increased by 20 percent to reflect higher quality row cropland (Nebraska was increased by 100 percent). Interest rates in 1986 typically range between 11 and 13 percent; 7- to 10-percent rates are often available on land contracts held by former owners. Use of 1984 corn and soybean yields in the calculations is conservative, since yields were substantially higher in 1985. Input price reductions may save the farmers sampled about \$4,700 compared with 1984, while land idled under the acreage reduction program is projected to reduce costs another \$4,800. Farms with sales of \$100,000 or more achieved higher cash flows than the averages shown.

Principal repayment and family living expenses information was not available in the survey data. Also, the cash flow projections do not fully incorporate any input expenses that are shared by landlords on the farms sampled (the results are projected on an operator full-owner basis).

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Cash Flow Needed to Buy Land at 10 and 12 Percent Interest

	1984, 12-percent interest	Projected 1986, 12- percent interest	Projected 1986, 10- percent interest
Commodity receipts			
Corn	\$78,404	\$52,772	\$52,772
Soybeans	39,354	32,377	32,377
Corn deficiency payments 1/	2,881	28,983	28,983
TOTAL RECEIPTS	\$120,639	\$114,132	\$114,132
Operating expense (excluding real estate interest)	\$76,651	\$66,953	\$66,953
Interest expense	73,829	45,470	37,891
TOTAL EXPENSE	\$150,480	\$112,423	\$104,844
Net cash flow (excluding principal repayment and family living expense)	-\$29,841	\$1,168	\$9,288

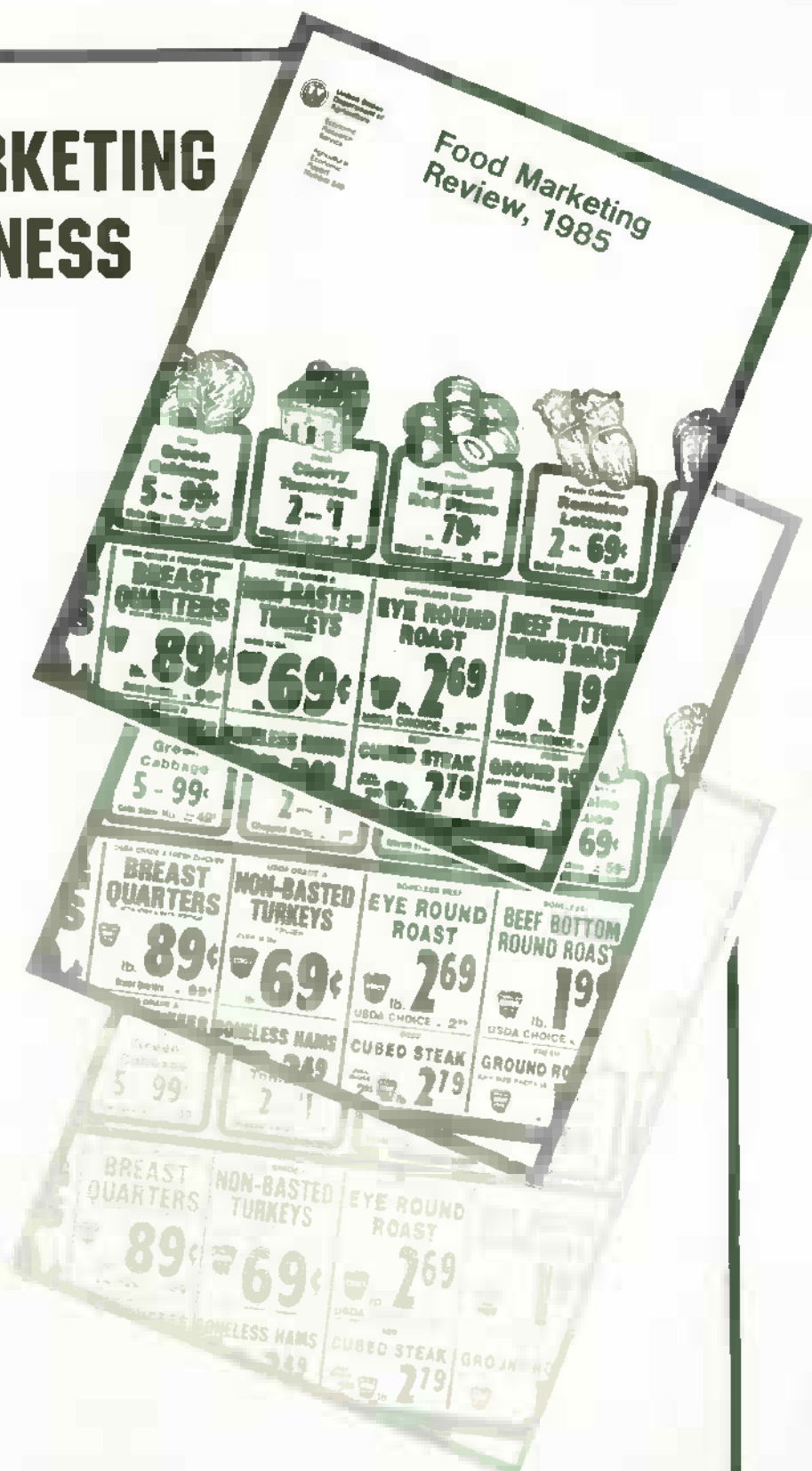
1/ Partial participation in Government programs occurred in 1984 with lower deficiency payments per bushel.

Sources: 1984 *Farm Costs and Returns Survey*.

U.S. FOOD MARKETING IS BIG BUSINESS

Sales in the U.S. food marketing system in 1985 reached an estimated half a trillion dollars and grew faster than the gross national product. The food marketing system comprises more than 1 million firms in food manufacturing, wholesaling, retailing, and service and employs more than 1 out of every 10 U.S. workers. The future of these firms, workers, and the food marketing system as a whole are examined in *FOOD MARKETING REVIEW, 1985*.

FOOD MARKETING REVIEW, 1985 can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Order by title and stock number 001-019-00455-0. Price is \$3.00 domestic, \$3.75 foreign. Call GPO at (202) 783-3238 to charge your purchase to your VISA, Choice, MasterCard, or GPO Deposit Account. Bulk discounts available.



Statistical Indicators

Summary Data

Table 1.—Key statistical indicators of the food and fiber sector

	1985					1986				
	I	II	III	IV F	Annual F	I F	II F	III F	Annual F	
Prices received by farmers (1977=100)	135	130	123	126	129	123	120	122	121	
Livestock & products	143	135	129	136	136	133	127	135	134	
Crops	125	125	117	115	121	112	112	109	109	
Prices paid by farmers, (1977=100)										
Prod. items	154	152	149	149	151	149	145	144	145	
Commodities & services, int., taxes, & wages	163	164	162	162	163	163	160	160	160	
Cash receipts (\$ bil.) 1/	140	134	134	163-165	142-144	133-137	122-126	125-129	129-133	
Livestock (\$ bil.)	72	67	68	71-73	68-70	67-71	62-66	67-71	67-71	
Crops (\$ bil.)	68	67	66	91-93	73-75	64-68	58-62	57-61	60-64	
Market basket (1967=100)										
Retail cost	284	282	282	283	283	284	285	287	285-289	
Farm value	250	237	229	236	238	224	221	231	225-230	
Spread	304	309	313	310	309	332	336	333	330-335	
Farm value/retail cost (%)	33	31	30	31	31	29	29	30	30	
Retail prices (1967=100)										
Food	309	310	310	311	310	315	316	318	316-322	
At home	298	297	296	297	297	301	302	304	300-306	
Away-from home	341	346	349	351	347	354	356	358	355-359	
Agricultural exports (\$ bil.) 2/	8.8	6.8	5.7	7.8	31.2	7.4	6.0	6.8	28.0	
Agricultural imports (\$ bil.) 2/	5.5	5.0	4.6	4.9	19.7	5.6	5.0	5.5	21.0	
Production:										
Red meats (mil. lb.)	9,522	9,869	9,931	9,814	39,136	9,551	9,723	9,495	38,116	
Poultry (mil. lb.)	3,858	4,269	4,452	4,293	16,872	4,088	4,485	4,720	17,923	
Eggs (mil. doz.)	1,430	1,408	1,408	1,442	5,688	1,421	1,410	1,420	5,706	
Milk (bil. lb.)	33.7	37.5	36.8	35.6	143.7	36.2	38.3	35.4	143.9	
Consumption, per capita:										
Red meats and poultry (lbs)	51.0	53.4	54.5	55.1	214.0	51.7	53.3	52.9	211.5	
Corn beginning stocks (mil. bu.) 3/	6,631.1	4,623.2	2,835.5	1,648.2	1,648.2	8,614.7	—	—	3,886.0	
Corn use (mil. bu.) 3/	2,008.3	1,788.8	1,188.4	1,899.5	6,630.0	2,039.8	—	—	6,975.0	
Prices: 4/										
Choice steers—Omaha (\$/cwt)	62.24	57.66	52.17	61.42	58.37	57.22	55-58	58-64	57-62	
Barrows and gilts—7 mths. (\$/cwt)	47.32	43.09	43.62	45.05	44.77	43.30	40-43	42-48	42-46	
Broilers—12-city (cts./lb.)	51.5	50.7	50.9	50.2	50.8	50.3	49-52	47-53	48-52	
Eggs—NY Gr. A large (cts./doz.)	61.7	60.0	68.3	75.9	66.5	74.2	62-65	65-71	67-71	
Milk—all at plant (\$/cwt.)	13.67	12.50	12.17	12.60	12.73	12.37	11.90-12.10	12.20-12.60	12.40-12.70	
Wheat—Kansas city HRW (\$/bu.)	3.72	3.47	3.09	3.31	3.40	3.33	—	—	—	
Corn—Chicago (\$/bu.)	2.81	2.86	2.52	2.41	2.65	2.33	—	—	—	
Soybeans—Chicago (\$/bu.)	5.92	5.89	5.52	5.09	5.55	5.28	—	—	—	
Cotton—Avg. spot mkt. (cts./lb.)	59.6	60.5	57.9	56.1	58.5	60.0	—	—	—	
	1978	1979	1980	1981	1982	1983	1984	1985	1986 F	
Gross cash income (\$ bil.)	117.1	135.1	143.3	146.5	149.0	148.1	153.3	152-155	145-149	
Gross cash expenses (\$ bil.)	82.6	98.1	106.1	110.7	110.7	109.8	114.1	109-111	101-105	
Net cash income (\$ bil.)	34.6	37.0	37.2	35.8	38.3	38.3	39.2	43-46	42-46	
Net farm income	27.4	31.7	20.2	29.8	24.6	15.0	34.5	29-32	26-30	
Farm real estate values (1977=100)	109	125	145	158	157	148	146	128	112	

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated.
 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; feed year annual—Use includes exports and domestic disappearance. 4/ Simple averages. F = Forecast.

U.S. and Foreign Economic Data

Table 2.—U.S. gross national product and related data

	Annual			1985				1986
	1983	1984	1985	I	II	III	IV	I p
\$ Bil. (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,401.6	3,774.7	3,988.5	3,917.5	3,960.6	4,016.9	4,059.3	4,116.7
Personal consumption expenditures	2,229.3	2,423.0	2,582.3	2,525.0	2,563.3	2,606.1	2,634.8	2,670.6
Durable goods	289.6	331.1	361.5	351.5	356.5	376.0	362.0	362.4
Nondurable goods	817.0	872.4	912.2	895.7	910.2	914.5	928.3	939.2
Clothing & shoes	135.2	147.4	156.0	152.8	156.3	155.7	159.4	161.3
Food & beverages	422.0	451.7	474.0	465.5	472.1	475.9	482.5	491.5
Services	1,122.7	1,219.6	1,308.6	1,277.8	1,296.6	1,315.6	1,344.6	1,369.1
Gross private domestic investment	501.9	674.0	669.3	657.6	672.8	666.1	680.7	708.0
Fixed investment	508.3	607.0	661.8	639.1	657.3	665.9	685.0	678.3
Change in business inventories	-6.4	67.1	7.5	18.5	15.5	0.2	-4.3	29.7
Net exports of goods & services	-5.3	-59.2	-78.5	-42.3	-70.3	-87.8	-113.4	-95.1
Government purchases of goods & services	675.7	736.8	815.4	777.2	794.8	832.5	857.2	833.1
1982 \$Bil. (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,277.7	3,492.0	3,570.0	3,547.8	3,557.4	3,584.1	3,590.8	3,619.2
Personal consumption expenditures	2,145.9	2,239.9	2,313.0	2,288.6	2,303.5	2,329.6	2,330.4	2,354.8
Durable goods	283.6	318.6	345.3	335.0	340.3	359.3	346.7	345.4
Nondurable goods	800.7	828.0	846.9	839.9	846.7	849.8	851.1	867.1
Clothing & shoes	132.7	142.8	146.9	145.0	147.4	146.9	148.1	152.4
Food & beverages	414.3	423.0	436.0	430.1	436.8	439.5	437.8	444.4
Services	1,061.7	1,093.3	1,120.8	1,113.7	1,116.5	1,120.4	1,132.6	1,142.2
Gross private domestic investment	503.4	661.3	649.0	639.6	655.6	645.0	655.7	674.8
Fixed investment	508.9	598.6	643.3	623.8	640.5	646.8	662.0	648.7
Change in business inventories	-5.5	62.7	5.7	15.8	15.1	-1.8	-6.3	26.0
Net exports of goods & services	-19.4	-85.0	-108.4	-71.8	-101.1	-119.8	-140.8	-126.0
Government purchases of goods & services	647.8	675.9	716.4	691.4	699.4	729.2	745.5	715.6
GNP implicit price deflator								
% change	3.8	4.1	3.3	3.0	3.3	2.9	3.3	2.5
Disposable personal income (\$bil.)	2,425.4	2,670.2	2,800.8	2,739.2	2,817.7	2,800.2	2,845.9	2,894.1
Disposable per. income (1982 \$bil.)	2,334.6	2,468.4	2,508.7	2,482.7	2,532.2	2,503.1	2,517.1	2,551.7
Per capita disposable per. income (\$)	10,328	11,263	11,703	11,487	11,790	11,687	11,847	12,023
Per capita dis. per. income (1982 \$)	9,942	10,412	10,483	10,411	10,595	10,447	10,479	10,601
U.S. population, total, incl. military abroad (mil.)	234.8	237.1	239.3	238.5	239.0	239.6	240.2	240.7
Civilian population (mil.)	232.6	234.9	237.0	236.2	236.8	237.4	237.9	238.4
	Annual			1985		1986		
	1983	1984	1985	Mar	Dec	Jan	Feb	Mar p
Monthly data seasonally adjusted except as noted								
Industrial production (1977=100)	109.2	121.8	124.5	124.0	126.4	126.6	125.7	125.1
Leading economic indicators (1967=100)	156.0	165.7	168.7	167.6	174.1	174.1	175.7	176.6
Civilian employment (mil. persons)	100.8	105.0	107.2	107.0	108.2	109.0	108.6	108.8
Civilian unemployment rate (%)	9.6	7.5	7.2	7.3	6.9	6.7	7.3	7.2
Personal income (\$ bil. annual rate)	2,836.4	3,111.9	3,293.5	3,258.2	3,384.3	3,386.5	3,400.6	3,406.5
Money stock-M2 (daily avg.) (\$bil.) 1/	2,188.8	2,373.7	2,565.8	2,429.4	2,565.8	2,569.1	2,576.8	2,590.4
Three-month Treasury bill rate (%)	8.63	9.58	7.48	8.57	7.07	7.04	7.03	6.59
Aaa corporate bond yield (Moody's) (%)	12.04	12.71	11.37	12.56	10.16	10.05	9.67	9.00
Housing starts (thou.) 2/	1,703	1,750	1,742	1,849	1,882	2,034	1,997	1,949
Auto sales at retail, total (mil.)	9.2	10.4	11.0	10.7	11.5	11.5	10.9	9.7
Business inventory/sales ratio	1.38	1.34	1.37	1.39	1.35	1.35	1.37	—
Sales of all retail stores (\$ bil.)	97.9	107.8	114.5	111.9	116.9	117.3	117.4 p	116.6
Nondurable goods stores (\$ bil.)	64.8	68.9	71.6	70.5	73.0	73.2	73.6 p	73.5
Food stores (\$ bil.)	21.2	22.5	23.5	23.1	24.2	24.3	24.3 p	24.6
Eating & drinking places (\$ bil.)	9.6	10.4	10.9	10.8	11.0	11.3	11.4 p	11.3
Apparel & accessory stores (\$ bil.)	5.0	5.4	5.8	5.7	6.0	5.9	5.9 p	6.0

1/ Annual data as of December of the year listed. 2/ Private, including farm. p = preliminary.

Table 3.—Foreign economic growth, inflation, and exports

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985 est.
Annual percent change								
Total foreign								
Real GNP	5.0	3.7	2.6	1.6	1.7	1.9	3.0	3.2
CPI	10.2	14.0	16.1	15.3	14.4	18.4	21.7	21.5
Export earnings	27.5	14.6	22.6	-2.0	-7.7	-2.2	5.9	.6
Developed less U.S.								
Real GNP	4.8	3.1	2.3	1.3	1.1	1.9	3.4	3.0
CPI	8.4	9.4	10.9	9.6	8.1	6.1	9.1	4.7
Export earnings	23.9	14.9	17.0	-3.3	-4.2	-0.5	6.1	4.6
Centrally planned								
Real GNP	5.1	3.9	1.5	2.1	2.7	3.4	3.5	4.2
Export earnings	19.4	16.1	16.4	3.4	6.0	8.2	-3.1	0.5
Latin America								
Real GNP	7.4	5.1	5.3	.7	-5	-2.7	3.0	4.1
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.2	179.6
Export earnings	28.1	12.8	30.1	4.4	-9.9	0	5.9	-3.3
Africa & Middle East								
Real GNP	8.9	6.5	1.3	0	1.4	.1	-2	1.1
CPI	8.7	16.4	16.3	14.5	12.0	15.5	10.9	9.0
Export earnings	49.6	43.0	38.5	-6.7	-20.1	-17.3	-4.7	-1.6
Asia								
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.2	3.5
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.6	6.4
Export earnings	30.1	19.4	27.3	4.4	-1	3.8	13.9	-2.9

1/ Export earnings measured in U.S. dollars.

Farm Prices

Table 4.—Indexes of prices received and paid by farmers, U.S. average

	Annual			1985			1986			
	1983	1984	1985 p	Apr	Nov	Dec	Jan	Feb	Mar	Apr p
	1977=100									
Prices received										
All farm products	135	142	129	132	127	128	124	122	122	120
All crops	128	139	121	126	116	118	113	111	111	112
Food grains	148	144	133	142	134	135	133	131	135	131
Feed grains & hay	143	145	122	132	109	113	114	113	113	112
Food grains	146	148	122	133	108	113	114	112	111	110
Cotton	104	108	92	94	93	88	88	92	91	91
Tobacco	155	153	156	157	154	146	146	145	143	142
Oil-bearing crops	102	109	84	91	76	76	77	78	78	77
Fruit, all	128	203	187	181	196	178	160	154	150	146
Fresh market 1/	131	221	201	193	209	189	167	160	156	151
Commercial vegetables	130	135	130	125	135	178	138	117	126	144
Fresh market	129	133	125	118	130	186	133	108	120	143
Potatoes etc. 2/	123	157	125	146	91	89	88	91	94	110
Livestock & products	141	146	136	136	138	137	135	133	132	128
Meat animals	147	151	142	144	143	142	141	139	136	133
Dairy products	140	139	131	133	130	130	129	128	126	124
Poultry & eggs	118	135	119	110	133	131	122	116	125	115
Prices paid										
Commodities & services,										
interest, taxes, & wage rates	160	164	163	164	162	162	163	163	—	160
Production items	153	155	151	153	149	149	150	149	—	145
Feed	134	135	116	120	110	112	114	113	—	112
Feeder livestock	160	154	154	162	150	145	147	151	—	147
Seed	141	151	153	150	154	154	154	154	—	141
Fertilizer	137	143	135	137	130	128	128	128	—	125
Agricultural chemicals	125	128	128	126	128	128	128	128	—	126
Fuels & energy	202	201	201	201	205	206	203	188	—	160
Farm & motor supplies	152	147	146	147	144	144	145	145	—	144
Autos & trucks	170	182	193	189	199	199	198	197	—	197
Tractors & self-propelled machinery	174	181	178	180	174	174	174	174	—	175
Other machinery	171	180	183	182	184	184	184	184	—	184
Building & fencing	138	138	136	136	135	136	136	136	—	135
Farm services & cash rent	146	148	150	150	152	150	153	153	—	153
Interest payable per acre on farm real estate debt	250	251	242	242	250	242	237	237	—	237
Taxes payable per acre on farm real estate	129	132	133	133	135	133	136	136	—	136
Wage rates (seasonally adjusted)	148	151	154	158	150	150	150	150	—	150
Production items, interest, taxes, & wage rates	159	161	157	159	155	155	156	155	—	152
Ratio, prices received to prices paid 3/	84	86	79	80	78	79	76	75	75	75
Prices received (1910-14=100)	614	650	587	601	581	585	567	557	557	550
Prices paid, etc. (Parity index) (1910-14=100)	1,104	1,130	1,121	1,128	1,116	1,116	1,121	1,119	—	1,102
Parity ratio (1910-14=100) 3/	56	58	52	53	52	52	51	50	—	50

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Includes sweetpotatoes and dry edible beans. 3/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Prices paid data will be published in January, April, July, and October. p = preliminary.

Table 5.—Prices received by farmers, U.S. average

	Annual*			1985			1986			
	1983	1984	1985 p	Apr	Nov	Dec	Jan	Feb	Mar	Apr p
Crops										
All wheat (\$/bu.)	3.58	3.46	3.20	3.43	3.23	3.25	3.19	3.15	3.28	3.16
Rice, rough (\$/cwt.)	8.76	8.07	7.85	8.20	7.84	7.71	7.90	7.86	7.60	7.40
Corn (\$/bu.)	2.99	3.05	2.49	2.70	2.21	2.29	2.33	2.32	2.29	2.25
Sorghum (\$/cwt.)	4.89	4.60	3.98	4.46	3.47	3.76	3.69	3.55	3.67	3.76
All hay, baled (\$/ton)	73.70	75.40	70.20	72.50	66.00	67.20	67.80	67.30	68.00	69.20
Soybeans (\$/bu.)	6.73	7.02	5.42	5.88	4.92	5.00	5.16	5.18	5.23	5.13
Cotton, Upland (cts./lb.)	62.9	65.6	55.9	57.0	56.0	53.3	53.0	55.4	55.0	55.1
Potatoes (\$/cwt.)	5.82	5.69	3.91	5.80	3.35	3.23	3.11	3.30	3.50	4.31
Lettuce (\$/cwt.) 1/	12.31	10.98	10.63	9.05	13.30	26.20	11.80	8.55	11.00	15.60
Tomatoes (\$/cwt.)	20.10	25.62	22.51	33.20	32.60	43.30	34.20	22.80	25.10	29.30
Onions (\$/cwt.)	11.17	9.70	7.75	9.50	6.77	8.09	6.21	6.31	6.83	9.09
Dry edible beans (\$/cwt.)	22.40	18.80	n.a.	19.80	17.50	17.30	17.40	16.90	16.80	17.30
Apples for fresh use (cts./lb.)	14.9	15.5	n.a.	15.1	17.5	17.7	17.0	17.9	18.4	17.3
Pears for fresh use (\$/ton)	216.00	300.00	339.00	440.00	374.00	357.00	348.00	350.00	417.00	440.00
Oranges, all uses (\$/box) 2/	5.95	7.97	n.a.	7.90	5.76	5.07	4.05	3.69	3.69	3.39
Grapefruit, all uses (\$/box) 2/	2.68	3.77	n.a.	3.49	3.19	3.71	3.70	3.72	3.90	4.58
Livestock										
Beef cattle (\$/cwt.)	55.80	57.60	54.00	56.20	54.80	53.70	53.20	53.00	52.40	51.30
Calves (\$/cwt.)	62.10	60.20	62.40	65.40	61.40	58.80	60.10	62.80	61.90	61.00
Hogs (\$/cwt.)	46.20	47.60	43.90	41.20	43.20	45.30	44.30	42.80	40.40	39.30
Lambs (\$/cwt.)	55.50	60.30	68.10	68.40	66.00	62.70	63.90	67.00	64.90	67.00
All milk, sold to plants (\$/cwt.)	13.58	13.46	12.75	12.90	12.60	12.60	12.50	12.40	12.20	12.00
Milk, manuf. grade (\$/cwt.)	12.61	12.49	11.72	11.90	11.80	11.70	11.60	11.40	11.30	11.20
Broilers (cts./lb.)	29.3	33.1	30.1	28.5	31.7	30.0	30.5	29.0	30.2	29.9
Eggs (cts./doz.) 3/	63.1	70.2	57.3	53.1	66.4	66.2	65.1	61.5	68.3	57.8
Turkeys (cts./lb.)	36.5	46.6	48.0	39.2	58.4	59.1	35.7	36.4	36.9	38.0
Wool (cts./lb.) 4/	61.5	76.5	67.0	67.9	56.6	57.9	54.3	55.8	61.7	67.8

1/ Due to program modifications, 1983 data not comparable with 1984 and 1985. 2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 4/ Average local market price, excluding incentive payments. *Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. p = preliminary. n.a. = not available.

Producer and Consumer Prices

Table 6.—Consumer Price Index for all urban consumers, U.S. average (not seasonally adjusted)

	Annual	1985						1986		
	1985	Mar	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
1967=100										
Consumer price index, all items	322.2	318.8	323.5	324.5	325.5	326.6	327.4	328.4	327.5	326.0
Consumer price index, less food	323.3	319.1	325.0	326.2	327.4	328.5	328.9	329.5	328.5	326.6
All food	309.8	309.7	309.7	309.9	309.8	311.0	313.2	315.6	315.3	315.4
Food away from home	346.6	342.6	348.4	349.9	350.3	351.3	352.1	353.1	354.2	355.5
Food at home	296.8	296.4	295.9	295.6	295.3	296.6	299.3	302.5	301.5	301.2
Meats 1/	265.5	269.5	261.2	260.4	261.2	266.3	270.1	270.6	268.4	266.6
Beef & veal	269.7	275.3	261.8	261.1	263.2	270.8	277.8	275.7	272.3	271.3
Pork	253.1	256.5	253.8	252.1	249.9	254.0	254.7	259.3	257.0	253.4
Poultry	216.4	217.3	213.9	215.9	214.3	216.8	220.3	218.2	218.5	218.2
Fish	405.9	403.3	406.1	408.6	407.9	419.0	420.3	443.9	430.6	435.6
Eggs	174.3	172.1	171.0	185.7	187.4	190.8	196.7	194.4	186.7	190.8
Dairy products 2/	258.0	258.9	257.4	258.0	257.1	257.1	256.9	257.2	257.3	256.8
Fats & oils 3/	294.4	294.9	297.1	294.8	291.2	292.1	290.3	292.1	291.4	290.2
Fresh fruit	361.8	362.9	375.9	368.5	358.5	336.3	335.8	350.8	353.3	352.0
Processed fruit 4/	168.2	167.6	169.6	169.5	168.7	168.2	167.0	166.8	165.7	164.9
Fresh vegetables	317.5	342.0	301.4	286.7	288.1	300.0	338.3	362.3	311.1	309.0
Potatoes	324.6	338.3	331.8	283.3	260.0	257.6	260.1	267.9	262.8	261.9
Processed vegetables 4/	147.7	147.1	149.0	148.2	147.5	147.1	147.1	147.5	147.6	147.2
Cereals & bakery products 4/	317.0	314.4	318.5	319.2	318.9	319.9	321.9	322.0	322.5	322.7
Sugar & sweets	398.8	394.8	401.8	401.1	402.6	401.4	402.2	405.1	408.6	408.4
Beverages, nonalcoholic	451.7	454.0	449.6	452.8	454.1	451.7	448.8	459.7	485.3	488.0
Apparel commodities less footwear	188.1	187.6	187.3	192.6	194.0	193.6	191.1	186.3	185.2	187.5
Footwear	212.1	213.1	210.3	210.9	212.3	215.5	213.1	209.1	207.9	210.1
Tobacco products	328.5	323.7	331.5	332.8	334.4	334.7	337.4	342.7	344.7	345.6
Beverages, alcoholic	229.5	226.5	228.9	229.3	236.4	236.2	236.2	237.5	238.3	238.8

1/ Beef, veal, lamb, pork, and processed meat. 2/ Includes butter. 3/ Excludes butter. 4/ December 1977 = 100.

Table 7.—Producer price indexes, U.S. average (not seasonally adjusted)

	Annual			1985				1986		
	1983	1984	1985 p	Mar	Oct	Nov	Dec	Jan	Feb	Mar
	1967=100									
Finished goods 1/	285.2	291.1	293.8	292.1	294.7	296.4	297.2	296.2	292.3	288.1
Consumer foods	261.8	273.3	271.2	273.7	268.2	271.8	274.4	274.9	272.3	272.2
Fresh fruit	252.0	253.0	256.0	249.5	244.4	261.6	270.1	246.8	250.4	240.7
Fresh & dried vegetables	248.9	278.3	245.3	282.7	206.4	202.8	244.8	244.0	203.7	215.2
Dried fruit	409.9	386.6	362.7	356.0	374.7	367.9	369.3	369.3	369.0	369.0
Canned fruit & juice	286.8	312.4	323.1	326.1	321.1	316.0	314.2	314.2	313.3	314.1
Frozen fruit & juice	300.9	351.4	363.1	373.4	351.0	341.3	341.3	325.5	321.5	311.2
Fresh veg. excl. potatoes	210.0	219.1	205.9	241.0	178.1	173.2	220.4	220.0	169.6	189.7
Canned veg. and juices	247.1	252.6	246.9	251.2	243.6	239.6	238.4	241.1	243.9	245.5
Frozen vegetables	283.6	291.0	298.4	297.5	299.5	298.9	298.8	298.6	299.2	299.6
Potatoes	319.8	397.7	304.3	341.0	237.7	241.9	264.7	263.2	267.5	244.7
Eggs	n.a.	210.8	171.0	167.6	191.1	195.2	200.0	191.6	176.0	182.1
Bakery products	285.9	299.1	313.5	309.0	318.6	318.5	319.3	321.2	320.6	321.1
Meats	236.4	236.8	227.5	231.1	225.1	232.8	232.7	229.5	222.0	218.3
Beef & veal	236.3	237.1	220.1	229.0	215.9	229.2	224.5	219.9	210.7	208.8
Pork	227.5	226.5	224.0	218.9	226.5	227.6	233.2	231.2	221.2	213.5
Poultry	185.3	206.0	197.5	193.9	199.8	208.5	204.9	192.0	187.5	188.5
Fish	445.2	476.0	492.1	491.8	465.7	518.0	556.4	567.4	571.0	573.5
Dairy products	250.6	251.7	249.4	253.3	246.0	246.2	246.2	245.9	246.1	245.9
Processed fruits & vegetables	277.4	294.3	296.7	300.0	293.3	288.8	288.8	286.8	287.2	286.9
Shortening & cooking oils	254.7	311.6	290.5	306.9	264.2	265.6	262.4	262.3	254.7	247.8
Consumer finished goods less foods	291.4	294.8	299.1	296.0	299.4	300.7	301.1	298.8	292.5	284.4
Beverages, alcoholic	205.0	209.8	213.0	210.5	215.6	215.8	215.8	216.2	216.4	217.5
Soft drinks	327.4	340.2	344.2	347.0	341.9	340.8	341.0	341.9	345.9	348.2
Apparel	197.4	201.3	204.2	203.3	204.8	204.8	205.1	204.9	205.7	205.8
Footwear	250.1	251.7	256.8	255.2	259.0	258.4	258.9	259.7	260.4	261.5
Tobacco products	365.4	398.4	428.2	420.7	435.1	435.4	435.5	451.0	451.5	451.6
Intermediate materials 2/	312.3	320.0	318.7	318.6	317.6	318.1	318.8	317.2	313.5	309.4
Materials for food manufacturing	258.4	271.1	258.7	263.9	252.3	254.0	253.0	252.4	248.9	246.3
Flour	186.2	185.2	183.1	186.0	180.4	183.6	183.9	182.6	182.3	183.9
Refined sugar 3/	172.1	173.5	165.6	166.2	163.8	163.1	162.9	165.7	165.2	165.7
Crude vegetable oils	194.2	262.2	219.4	246.0	181.3	169.9	163.4	164.8	153.9	139.5
Crude materials 4/	323.6	330.8	306.2	312.3	297.8	304.7	304.7	301.3	290.5	280.9
Foodstuffs & feedstuffs	252.2	259.5	235.0	242.9	224.6	236.6	236.8	231.4	226.9	224.0
Fruits & vegetables 5/	262.1	278.1	260.5	278.1	233.8	239.9	266.9	255.8	234.0	236.1
Grains	240.4	239.7	202.7	216.1	176.3	192.0	195.6	193.4	193.6	191.4
Livestock	243.1	251.8	229.7	236.6	227.3	239.2	237.9	231.0	224.4	218.7
Poultry, live	206.5	240.6	226.2	215.5	225.2	254.8	235.2	212.8	197.4	209.0
Fibers, plant & animal	227.0	228.4	197.8	200.4	191.3	189.8	186.6	196.3	198.4	206.8
Fluid milk	282.0	278.3	264.6	278.4	256.0	257.3	255.2	253.1	252.7	249.1
Oilseeds	245.3	253.3	202.7	213.0	175.7	194.1	193.2	195.0	197.4	199.2
Tobacco, leaf	274.2	274.6	274.1	280.0	275.9	271.0	257.2	243.9	242.2	238.9
Sugar, raw cane	315.9	312.0	291.2	298.0	273.3	267.6	272.6	283.2	288.1	291.7
All commodities	303.1	310.3	308.8	308.6	307.9	309.5	310.2	309.0	304.7	300.3
Industrial commodities	315.7	322.6	323.9	322.5	324.2	324.7	325.2	324.0	319.4	314.0
All foods 6/	257.5	269.2	264.6	267.7	260.6	264.4	266.8	266.9	263.6	262.9
Farm products & processed foods & feeds	253.9	262.4	250.5	254.6	245.1	251.0	252.1	250.9	247.9	247.0
Farm products	248.2	255.8	230.4	238.8	219.9	230.4	231.6	226.2	220.6	218.9
Processed foods & feeds 6/	255.9	265.0	260.5	262.3	257.8	261.2	262.3	263.5	261.9	261.5
Cereal & bakery products	261.0	270.5	279.7	277.8	282.8	282.6	283.0	284.0	283.5	284.1
Sugar & confectionery	292.8	301.2	291.1	292.5	286.1	285.3	286.1	291.9	293.3	295.1
Beverages	263.6	273.1	276.7	277.1	276.5	277.1	278.7	287.8	292.5	295.2

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. (Dec. 1977 = 100). 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). (1977 = 100). n.a. = not available.

Farm-Retail Price Spreads

Table 8.—Farm-retail price spreads

	Annual				1985				1986		
	1982	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Market basket 1/											
Retail cost (1967=100)	266.4	268.7	279.3	282.6	284.2	280.5	282.1	285.4	287.3	284.2	283.3
Farm value (1967=100)	247.8	242.3	255.4	237.1	248.5	225.8	237.5	242.8	233.7	223.6	222.8
Farm-retail spread (1967=100)	277.4	284.3	293.3	309.3	305.3	312.7	308.3	310.5	318.8	319.9	318.8
Farm value/retail cost (%)	34.4	33.4	33.9	31.1	32.4	29.8	31.2	31.5	30.1	29.2	29.1
Meat products											
Retail cost (1967=100)	270.3	267.2	268.1	265.5	269.5	261.2	266.3	270.1	270.6	268.4	266.6
Farm value (1967=100)	251.3	235.8	241.5	221.8	234.3	209.5	226.4	233.5	227.6	218.0	210.1
Farm-retail spread (1967=100)	292.4	304.0	299.1	316.6	310.8	321.7	313.0	312.9	321.0	327.5	332.7
Farm value/retail cost (%)	50.2	47.6	48.6	45.1	46.9	43.3	45.9	46.6	45.4	43.8	42.5
Dairy products											
Retail cost (1967=100)	247.0	250.0	253.2	258.0	258.9	257.1	257.1	256.9	257.2	257.3	256.8
Farm value (1967=100)	261.9	262.1	258.8	248.3	257.6	241.4	238.8	238.0	257.9	237.8	239.8
Farm-retail spread (1967=100)	233.9	239.3	248.3	266.5	260.1	271.1	273.2	273.5	274.1	274.4	271.7
Farm value/retail cost (%)	49.6	49.0	47.8	45.0	46.5	43.9	43.4	43.3	43.2	43.2	43.7
Poultry											
Retail cost (1967=100)	194.9	197.5	218.5	216.4	217.3	214.3	216.8	220.3	218.2	218.5	218.2
Farm value (1967=100)	201.9	213.0	249.9	234.9	224.5	234.9	259.2	251.8	219.7	212.5	219.8
Farm-retail spread (1967=100)	188.1	182.4	186.1	198.4	210.3	194.4	175.7	189.8	216.7	224.3	216.6
Farm value/retail cost (%)	30.7	33.1	36.3	33.4	30.8	33.9	38.8	36.2	49.5	47.8	49.6
Eggs											
Retail cost (1967=100)	178.7	187.1	209.0	174.3	172.1	187.4	190.8	196.7	194.4	186.7	190.8
Farm value (1967=100)	189.8	206.1	230.3	178.9	180.6	204.5	216.1	215.7	208.3	192.1	221.3
Farm-retail spread (1967=100)	162.7	159.5	178.2	167.6	159.8	162.6	194.3	169.1	174.3	178.9	164.7
Farm value/retail cost (%)	62.8	65.1	65.1	60.7	62.0	64.5	66.9	64.8	63.3	60.8	68.6
Cereal & bakery products											
Retail cost (1967=100)	283.4	292.5	305.3	317.0	314.4	318.9	319.9	321.9	322.0	322.5	322.7
Farm value (1967=100)	178.8	186.6	192.0	175.6	186.7	163.5	171.0	169.0	170.2	165.6	165.6
Farm-retail spread (1967=100)	305.1	314.0	328.7	346.3	340.8	350.5	350.7	353.6	353.4	355.0	355.0
Farm value/retail cost (%)	10.8	11.1	10.8	9.5	10.2	8.9	9.2	9.0	9.1	8.8	8.9
Fresh fruits											
Retail cost (1967=100)	323.2	303.6	345.3	383.5	381.2	382.5	359.5	358.4	373.6	372.1	367.1
Farm value (1967=100)	288.8	220.6	315.1	299.1	294.2	286.8	329.7	341.0	286.2	269.8	260.2
Farm-retail spread (1967=100)	338.7	340.8	358.9	421.4	420.3	425.5	372.9	366.1	412.8	418.0	415.1
Farm value/retail cost (%)	27.7	22.5	28.3	24.2	23.9	23.2	28.4	29.4	23.7	22.5	22.0
Fresh vegetables											
Retail costs (1967=100)	288.9	299.3	331.8	317.5	342.0	288.1	300.0	338.3	362.3	311.1	309.0
Farm value (1967=100)	261.3	267.4	298.7	256.7	305.8	183.3	208.7	286.3	257.3	179.0	206.9
Farm-retail spread (1967=100)	301.8	314.3	347.4	346.1	359.0	337.4	342.9	362.7	411.7	373.2	357.0
Farm value/retail cost (%)	28.9	28.6	28.8	25.9	28.6	20.4	22.2	27.1	22.7	18.4	21.4
Processed fruits & vegetables											
Retail cost (1967=100)	286.0	288.8	306.1	314.1	313.0	314.4	313.5	312.3	312.6	311.6	310.5
Farm value (1967=100)	321.1	300.5	343.5	378.5	380.9	381.0	379.4	358.5	345.0	333.4	324.7
Farm-retail spread (1967=100)	278.2	286.2	297.8	299.9	298.0	299.7	298.9	302.1	305.4	306.8	307.4
Farm value/retail cost (%)	20.4	18.9	20.3	21.8	22.1	22.0	21.9	20.8	20.0	19.4	18.9
Fats & oils											
Retail cost (1967=100)	259.9	263.1	288.0	294.4	294.9	291.2	292.1	290.3	292.1	291.4	290.2
Farm value (1967=100)	207.8	251.0	324.8	271.3	313.7	224.0	211.4	237.5	203.5	191.8	179.8
Farm-retail spread (1967=100)	279.9	267.8	273.8	303.3	287.7	317.0	323.2	310.6	326.2	329.7	332.6
Farm value/retail cost (%)	22.2	26.5	31.3	25.6	29.6	21.4	20.1	22.7	19.4	18.3	17.2

	Annual				1985				1986		
	1982	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Beef, Choice											
Retail price 2/ (cts./lb.)	242.5	238.1	239.6	232.6	238.6	224.2	229.9	236.9	236.9	232.5	230.3
Net carcass value 3/ (cts.)	150.7	145.4	147.6	135.2	137.0	136.0	148.8	147.7	138.6	130.0	128.1
Net farm value 4/ (cts.)	140.5	136.2	140.0	126.8	129.7	127.6	138.1	137.4	128.4	121.0	119.8
Farm-retail spread (cts.)	102.0	101.9	99.6	105.8	108.9	96.6	91.8	99.5	108.5	111.5	110.5
Carcass-retail spread 5/ (cts.)	91.8	92.7	92.0	97.4	101.6	88.2	81.1	89.2	98.3	102.5	102.2
Farm-carcass spread 6/ (cts.)	10.2	9.2	7.6	8.4	7.3	8.4	10.7	10.3	10.2	9.0	8.3
Farm value/retail price (%)	58	57	58	55	54	57	60	58	54	52	52
Pork											
Retail price 2/ (cts./lb.)	175.4	169.8	162.0	162.0	164.7	160.0	162.4	166.5	169.0	168.3	165.8
Wholesale value 3/ (cts.)	121.8	108.9	110.1	101.1	102.0	98.7	99.6	103.5	99.1	95.7	92.4
Net farm value 4/ (cts.)	88.0	76.5	77.4	71.4	69.6	70.5	70.6	75.3	72.9	69.5	65.5
Farm-retail spread (cts.)	87.4	93.3	84.6	90.6	95.1	89.5	91.8	91.2	96.1	98.8	100.3
Wholesale-retail spread 5/ (cts.)	53.6	60.9	51.9	60.9	62.7	61.3	62.8	63.0	69.9	72.6	73.4
Farm-wholesale spread 6/ (cts.)	33.8	32.4	32.7	29.7	32.4	28.2	29.0	28.2	26.2	26.2	26.9
Farm value/retail price (%)	50	45	48	44	42	44	43	45	43	41	40

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 736, ERS, USDA.

Table 9.—Price indexes of food marketing costs

	Annual			1984	1985				1986
	1983	1984	1985	IV	I	II	III	IV	I p
1967=100									
Labor-hourly earnings and benefits	356.8	367.3	367.3	368.9	369.7	368.1	365.3	366.5	368.1
Processing	341.9	351.2	358.8	351.7	357.2	360.0	357.2	361.6	366.3
Wholesaling	358.1	376.4	389.3	382.0	385.2	387.8	391.7	391.7	390.5
Retailing	371.1	379.4	366.1	380.1	375.3	367.5	361.5	360.2	359.9
Packaging & containers	280.7	307.6	308.2	314.8	314.5	312.9	305.7	296.9	302.1
Paperboard boxes & containers	251.0	281.1	275.1	292.5	286.3	279.4	269.7	265.6	264.3
Metal cans	374.3	397.3	414.3	407.4	413.7	414.3	414.6	419.8	429.9
Paper bags & related products	265.4	280.9	288.1	287.3	290.9	289.2	286.4	285.9	286.0
Plastic films & bottles	226.2	272.1	255.2	272.1	272.1	272.1	272.1	205.7	224.7
Glass containers	352.4	360.8	379.8	364.6	367.4	377.6	386.9	387.0	387.6
Metal foil	214.0	226.9	213.8	226.1	216.6	218.2	211.3	209.0	208.9
Transportation services	374.5	390.9	393.9	394.1	394.0	393.9	393.9	393.9	393.9
Advertising	280.2	300.5	320.7	304.7	315.3	319.0	322.6	324.4	333.1
Fuel & power	705.1	712.5	699.7	709.0	695.1	702.8	688.5	711.4	641.2
Electric	417.9	440.0	453.8	443.5	446.5	452.5	462.6	453.5	457.8
Petroleum	895.9	880.4	821.5	857.5	818.6	823.0	766.4	878.0	658.0
Natural gas	1,155.0	1,162.9	1,155.8	1,173.0	1,155.0	1,173.3	1,170.8	1,124.2	1,105.6
Communications, water & sewage	199.6	215.5	224.9	219.1	219.7	222.4	228.0	229.3	231.4
Rent	260.6	261.6	268.2	264.4	266.2	266.3	270.2	270.7	273.4
Maintenance & repair	338.2	350.3	360.3	354.5	357.9	358.4	360.7	364.1	367.2
Business services	291.9	306.1	321.3	311.7	315.8	320.6	323.7	327.3	328.4
Supplies	286.5	288.5	287.8	288.3	287.7	287.7	288.2	287.3	287.8
Property taxes & insurance	327.5	343.7	362.0	348.9	353.8	358.1	365.5	370.7	375.3
Interest, short-term	174.0	198.8	157.2	181.1	170.1	157.5	150.7	150.7	145.1
Total marketing cost index	342.4	358.1	360.0	361.5	361.1	360.9	358.4	359.1	358.2

1/ Indexes measure changes in employee wages and benefits and in prices of supplies and services used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. p = preliminary.

Note: Annual historical data on food marketing cost indexes may be found in Food Consumption, Prices, and Expenditures, Statistical Bulletin 713, ERS, USDA.

Livestock and Products

Table 10.—U.S. meats supply and use

Item	Beg. stks	Pro-duc-tion 1/	Im-ports	Total supply	Ex-ports	Ship-ments	Mili-tary con-sump-tion	Ending stocks	Civilian consumption		Primary market price 3/
									Total	Per capita 2/	
										Pounds	
Million pounds 4/											
Beef:											
1984	325	23,598	1,823	25,746	329	47	112	358	24,900	78.5	65.34
1985	358	23,723	2,071	26,152	328	48	115	317	25,344	79.1	58.37
1986 F	317	23,067	2,125	25,507	450	60	100	300	24,597	76.1	57-62
Pork:											
1984	301	14,812	954	16,067	164	147	86	274	15,396	61.8	47.86
1985	274	14,807	1,128	16,209	128	131	78	229	15,643	62.1	43.77
1986 F	229	14,469	1,100	15,798	130	140	80	275	15,173	59.6	42-46
Veal:											
1984	9	495	24	528	6	1	4	14	503	1.8	60.23
1985	14	515	20	549	4	1	7	11	526	1.8	62.42
1986 F	11	520	23	554	4	0	7	7	536	1.9	60-64
Lamb and mutton:											
1984	11	379	20	410	2	3	0	7	398	1.5	62.18
1985	7	358	36	401	1	2	0	13	385	1.4	68.61
1986 F	13	335	38	386	2	1	0	9	374	1.4	64-68
Total red meat:											
1984	646	39,284	2,821	42,751	501	198	202	653	41,197	143.6	n.a.
1985	653	39,408	3,252	43,313	461	185	200	570	41,499	144.5	n.a.
1986 F	570	38,389	3,286	42,245	586	201	187	591	40,680	138.9	n.a.
Broilers:											
1984	21	13,011	0	13,032	407	145	34	20	12,426	52.9	55.6
1985	20	13,761	0	13,781	417	143	34	27	13,160	55.5	50.8
1986 F	27	14,451	0	14,478	470	130	35	25	13,818	57.7	48-52
Mature chickens:											
1984	92	696	0	788	26	2	2	119	638	2.7	n.a.
1985	119	637	0	756	21	1	2	144	588	2.5	n.a.
1986 F	144	616	0	760	20	4	1	110	625	2.6	n.a.
Turkeys:											
1984	162	2,685	0	2,847	27	7	13	125	2,676	11.4	74.4
1985	125	2,942	0	3,067	27	7	13	150	2,870	12.1	75.5
1986 F	150	3,347	0	3,497	30	7	16	220	3,224	13.5	67-71
Total poultry:											
1984	275	16,392	0	16,667	460	153	49	264	15,741	67.0	n.a.
1985	264	17,340	0	17,604	465	151	49	321	16,618	70.1	n.a.
1986 F	321	18,414	0	18,735	520	141	52	355	17,667	73.8	n.a.
Red meat & poultry:											
1984	921	55,676	2,821	59,418	961	351	251	917	56,938	210.6	n.a.
1985	917	56,587	3,252	60,917	926	336	249	891	58,515	214.6	n.a.
1986 F	891	56,803	3,286	60,980	1,106	342	239	946	58,347	212.7	n.a.

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: choice steers, Omaha 900-1,100 lbs.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY B-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry.
n.a. = not available. f = forecast.

Table 11.—U.S. egg supply and use

	Beg. stocks	Pro- duc- tion	Im- ports	Total supply	Ex- ports	Ship- ments	Milli- tary use	Hatch- ing use	Ending stocks	Civilian consumption		Wholesale price*
										Total	Per capita	
							Million dozen					
1981	19.4	5,824.7	4.7	5,848.7	234.2	22.5	25.1	506.7	17.5	5,042.7	265.4	73.2
1982	17.5	5,801.9	2.5	5,821.8	158.2	26.7	22.4	505.6	20.3	5,088.6	265.1	70.1
1983	20.3	5,659.2	23.4	5,703.0	85.8	26.6	25.1	500.0	9.3	5,056.2	260.8	75.2
1984	9.3	5,708.2	32.0	5,749.5	58.2	27.8	17.6	529.7	11.1	5,105.1	260.9	80.9
1985 e	11.1	5,687.5	12.7	5,711.3	70.6	30.3	20.2	548.1	10.7	5,031.3	254.6	66.4
1986 f	10.7	5,706.0	10.0	5,727.0	95.0	25.0	20.0	549.0	10.0	5,029.0	252.1	67-71

* Cartoned Grade A Large eggs in New York. e = estimated. f = forecast.

Table 12.—U.S. milk supply and use¹

Calendar year	Pro-duction	Farm use	Commercial		Im-ports	Total com-mercial supply	CCC net re-movals	Commercial		All milk price 2/
			Farm market-ings	Beg. stocks				Ending stocks	Disap-pear-ance	
Billion pounds										\$/cwt
1980	128.4	2.4	126.1	5.4	2.1	133.6	8.8	5.8	119.0	13.05
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.76
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.59
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.57
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.45
1985 p	143.7	2.5	141.2	4.9	2.8	148.9	13.2	4.6	131.1	12.73
1986 f	143.9	2.4	141.5	4.6	2.8	148.9	9.1	4.8	135.0	12.55

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. p = preliminary. f = forecast.

Table 13.—Poultry and eggs

	Annual			1985				1986		
	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Broilers										
Federally inspected slaughter, certified (mil. lb.)	12,389	12,999	13,569	1,082.5	1,251.9	997.8	1,094.1	1,199.5	1,087.0	1,102.4
Wholesale price, 12-city, lcts./lb. 1/	50.4	55.6	50.8	49.7	48.3	53.7	48.7	51.7	49.0	50.3
Price of grower feed (\$/ton)	223	233	197	214	181	182	186	191	189	—
Broiler-feed price ratio (lb.) 2/	2.6	2.8	3.1	2.8	3.1	3.5	3.2	3.2	3.1	—
Stocks beginning of period (mil. lb.)	22.3	21.2	19.7	22.9	27.7	27.7	27.6	26.6	26.6	25.2
Broiler-type chicks hatched (mil) 3/	4,447.0	4,593.9	4,803.8	418.8	382.6	379.0	416.5	409.4	376.0	432.7
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	2,563	2,574	2,800	176.4	341.5	282.5	210.7	187.3	174.6	188.8
Wholesale price, New York, 8-16 lb. young hens (cts./lb.)	60.5	74.4	75.5	67.0	90.2	93.1	86.9	60.2	61.7	66.0
Price of turkey grower feed (\$/ton)	247	245	213	220	207	212	213	209	211	—
Turkey-feed price ratio (lb.) 2/	3.0	3.8	4.4	3.6	5.5	5.5	5.6	3.4	3.5	—
Stocks beginning of period (mil. lb.)	203.9	161.8	125.3	129.5	444.5	484.0	208.2	150.2	156.8	161.3
Poults placed in U.S. (mil.)	181.8	190.0	197.8	18.5	12.5	12.6	14.4	17.2	18.6	20.7
Eggs										
Farm production (mil.)	68,169	68,230	68,407	4,942	5,759	5,662	5,883	5,862	5,295	4,929
Average number of layers (mil.)	276	278	277	230	278	280	280	281	280	232
Rate of lay (eggs per layer on farms)	247	245	247	21.4	20.7	20.2	21.0	20.9	18.9	21.2
Cartoned price, New York, grade A large (cts./doz.) 4/	75.2	80.9	66.4	65.5	73.8	77.8	76.1	73.3	68.3	80.8
Price of laying feed (\$/ton)	204	206	182	186	175	178	179	181	179	—
Egg-feed price ratio (lb.) 2/	6.2	6.8	6.3	6.2	7.3	7.4	7.4	7.2	6.9	—
Stocks, first of month										
Shell (thou. cases)	34	13	31	29	22	23	28	24	28	21
Frozen (mil. lb.)	25.4	11.8	13.4	13.9	16.4	15.1	13.8	13.2	12.7	12.8
Replacement chicks hatched (mil.)	407	459	407	36.9	33.6	33.6	34.6	34.4	34.7	39.7

1/ 12-city composite weighted average beginning April 25, 1983. 2/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 3/ Placement of broiler chicks are currently reported for 12 states only; henceforth, hatch of broiler-type chicks will be used as a substitute. 4/ Price of cartoned eggs to volume buyers for delivery to retailers.

Table 14.—Dairy

	Annual			1985				1986		
	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt.) 1/	12.49	12.29	11.48	11.95	11.21	11.19	11.18	11.12	11.04	11.02
Price of 16% dairy ration (\$/ton)	188	191	168	172	162	163	165	169	165	n.a.
Milk-feed price ratio 2/	1.45	1.42	1.51	1.55	1.56	1.55	1.53	1.52	1.50	n.a.
Wholesale prices										
Butter, Grade A Chl. (cts./lb.)	147.3	148.8	141.1	141.2	141.6	139.5	139.1	138.7	138.7	137.5
Am. cheese, Wis. assembly pt. (cts./lb.)	138.3	138.0	127.7	132.0	124.3	123.7	123.8	123.8	124.5	123.2
Nonfat dry milk, (cts./lb.) 3/	93.2	90.9	84.0	89.7	80.6	80.5	80.4	80.4	80.1	79.9
USDA net removals										
Total milk equiv. (mil. lb.) 4/	16,813.7	8,637.0	13,174.1	1,354.7	732.0	640.8	833.5	1,979.9	2,251.0	821.0
Butter (mil. lb.)	413.2	202.3	334.2	34.2	18.2	12.5	21.5	70.6	79.8	20.8
Am. cheese (mil. lb.)	832.8	447.3	629.0	65.1	35.6	38.3	39.1	52.5	60.5	39.3
Nonfat dry milk (mil. lb.)	1,061.0	678.4	940.6	63.9	78.9	55.1	75.1	86.1	100.0	65.6
Milk										
Total milk production (mil. lb.)	139,672	135,450	143,667	11,929	12,058	11,564	11,968	12,192	11,314	12,726
Milk per cow (lb.)	12,585	12,506	13,031	1,100	1,080	1,035	1,070	1,091	1,015	1,143
Number of milk cows (thou.)	11,098	10,833	11,025	10,848	11,162	11,168	11,183	11,163	11,140	11,130
Stocks, beginning 4/										
Total (mil. lb.)	20,054	22,646	16,429	15,667	15,288	14,432	13,692	13,464	13,355	13,887
Commercial (mil. lb.)	4,603	5,234	4,937	5,101	5,038	4,934	4,705	4,590	4,760	4,963
Government (mil. lb.)	15,451	17,412	11,492	10,566	10,250	9,498	8,987	8,874	8,595	8,925
Imports, total (mil. lb.) 4/	2,616	2,741	2,777	180	306	287	299	292	179	203
Commercial disappearance milk equiv. (mil. lb.)	122,474	126,776	131,043	10,615	11,538	11,247	11,351	10,136	8,860	11,654
Butter										
Production (mil. lb.)	1,299.2	1,103.3	1,247.8	105.9	109.0	99.4	115.4	135.8	119.4	120.2
Stocks, beginning (mil. lb.)	466.8	499.4	296.5	289.4	247.0	231.6	206.9	205.5	206.3	245.5
Commercial disappearance (mil. lb.)	881.7	902.7	918.2	74.3	87.5	90.9	94.5	60.7	31.8	95.1
American cheese										
Production (mil. lb.)	2,927.7	2,648.5	2,854.4	232.0	229.1	221.9	236.6	239.2	227.2	263.6
Stocks, beginning (mil. lb.)	981.4	1,161.5	960.5	897.7	933.1	883.3	866.6	850.2	838.8	810.8
Commercial disappearance (mil. lb.)	2,083.3	2,253.6	2,278.3	178.7	208.8	195.3	206.4	184.6	164.4	206.0
Other cheese										
Production (mil. lb.)	1,891.8	2,025.5	2,170.5	180.0	199.0	189.9	200.9	186.7	171.6	199.0
Stocks, beginning (mil. lb.)	82.8	104.9	101.4	100.4	99.5	97.3	95.0	94.1	93.8	89.3
Commercial disappearance (mil. lb.)	2,134.3	2,310.9	2,444.7	2,460.5	233.6	221.2	233.1	206.5	191.5	224.4
Nonfat dry milk										
Production (mil. lb.)	1,499.9	1,160.7	1,390.0	104.5	108.3	96.7	115.8	123.7	114.7	128.1
Stocks, beginning (mil. lb.)	1,282.0	1,405.2	1,247.6	1,136.2	1,032.2	1,034.9	1,042.7	1,011.1	981.4	947.0
Commercial disappearance (mil. lb.)	459.9	497.8	435.0	34.1	39.7	44.1	31.3	47.8	20.0	51.6
Frozen dessert production (mil. gal.) 5/	1,224.2	1,241.8	1,250.8	102.4	97.3	81.1	78.0	82.9	87.2	104.7

1/ Manufacturing grade milk. 2/ Pounds of 16% protein ration equal in value to 1 pound of milk. 3/ Prices paid f.o.b. Central States production area, high heat spray process. 4/ Milk-equivalent, fat-basis. 5/ Ice cream, ice milk, and hard sherbet. n.a. = not available.

Table 15.—Wool

	Annual			1985				1986		
	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
U.S. wool price, Boston 1/ (cts./lb.)	212	229	192	185	193	193	193	193	189	180
Imported wool price, Boston 2/ (cts./lb.)	248	241	197	200	197	190	193	204	202	205
U.S. mill consumption, scoured										
Apparel wool (thou. lb.)	126,729	128,982	106,051	9,618	8,582	8,846	8,870	12,627	11,126	10,925
Carpet wool (thou. lb.)	13,851	13,088	10,562	1,099	797	655	686	1,083	798	785

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents.

Table 16.—Meat animals

	Annual			1985				1986		
	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Cattle on feed (7-States)										
Number on feed (thou. head) 1/	8,316	8,006	8,635	8,635	6,461	7,582	7,892	7,860	7,624	7,860
Placed on feed (thou. head)	19,744	20,772	19,346	1,592	2,779	1,776	1,480	1,581	1,210	1,650
Marketings (thou. head)	18,701	18,785	18,989	1,559	1,573	1,380	1,401	1,740	1,470	1,563
Other disappearance (thou. head)	1,354	1,376	1,132	98	85	76	111	77	102	86
Beef steer-corn price ratio, Omaha (bu./2/	20.6	21.6	23.3	22.2	25.7	27.8	26.7	25.6	24.4	n.a.
Hog-corn price ratio, Omaha 2/	15.9	16.1	17.8	16.4	19.5	19.3	19.8	19.0	19.0	n.a.
Market prices (\$ per cwt.)										
Slaughter cattle:										
Choice steers, Omaha	62.37	65.34	58.37	59.28	58.02	63.30	62.94	59.69	56.42	55.55
Utility cows, Omaha	39.35	39.81	38.32	43.16	33.14	34.86	33.88	34.94	37.62	38.00
Choice vealers, S. St. Paul	72.97	63.95	58.28	60.00	60.00	55.00	45.94	45.00	52.50	55.00
Feeder cattle:										
Choice, Kansas City, 600-700 lb.	63.70	65.28	64.56	67.40	62.37	62.86	60.98	62.16	62.42	63.22
Slaughter hogs:										
Barrows & gilts, 7-markets	47.71	48.86	44.77	46.31	44.09	44.14	46.91	45.48	43.55	40.88
Feeder pigs:										
S. Mo. 40-50 lb. (per head)	34.03	39.12	37.20	43.93	36.49	31.67	28.65	30.96	37.26	41.33
Slaughter sheep & lambs:										
Lambs, Choice, San Angelo	57.40	62.18	68.61	70.12	67.25	64.17	59.33	65.81	67.50	63.58
Ewes, Good, San Angelo	16.85	20.90	34.02	37.12	30.25	32.83	36.67	34.69	31.88	33.12
Feeder lambs:										
Choice, San Angelo	54.87	61.02	85.91	73.25	81.65	87.92	84.67	77.90	75.12	66.69
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb.	97.83	98.01	90.76	92.00	91.11	98.84	99.68	92.26	86.82	85.04
Canner & Cutter cow beef	78.48	74.70	74.13	80.94	68.12	68.37	67.08	69.71	72.92	72.12
Pork loins, 8-14 lb. 3/	—	96.36	91.51	84.22	97.85	100.34	90.00	95.43	91.75	88.12
Pork bellies, 12-14 lb.	60.58	60.08	59.50	64.25	52.09	58.63	51.73	61.27	51.50	50.80
Hams, skinned, 14-17 lb.	75.60	78.22	67.50	70.44	72.00	66.67	n.a.	64.44	63.00	61.12
Commercial slaughter (thou. head)*										
Cattle	36,649	37,570	36,289	2,883	3,242	2,812	2,924	3,330	2,715	2,839
Steers	17,486	17,474	16,906	1,349	1,408	1,238	1,293	1,515	1,270	1,339
Heifers	10,758	10,691	11,235	905	1,024	799	830	988	851	871
Cows	7,597	8,617	7,387	569	737	710	743	765	547	573
Bulls & stags	808	789	758	594	72	65	58	61	48	56
Calves	3,076	3,292	3,385	279	319	288	316	307	272	294
Sheep & lambs	6,619	6,758	6,179	578	571	476	505	518	452	540
Hogs	87,584	85,156	84,469	7,134	7,789	7,012	6,898	7,185	6,299	6,855
Commercial production (mil. lb.)										
Beef	23,058	23,410	23,548	1,858	2,109	1,812	1,853	2,139	1,769	1,861
Veal	429	477	498	40	46	42	46	46	40	43
Lamb & mutton	368	372	352	33	33	28	30	31	27	32
Pork	15,120	14,718	14,721	1,232	1,358	1,237	1,215	1,266	1,101	1,198

	Annual			1984	1985				1986	
	1983	1984	1985	IV	I	II	III	IV	I	II
Cattle on feed (13-States)										
Number on feed (thou. head) 1/	10,271	9,908	10,653	9,000	10,653	9,688	8,670	7,937	9,694	8,915
Placed on feed (thou. head)	23,776	24,917	23,276	7,559	5,315	5,206	5,480	7,275	7,305	—
Marketings (thou. head)	22,548	22,540	22,857	5,507	5,907	5,787	5,969	5,194	5,810	5/ 5,723
Other disappearance (thou. head)	1,591	1,632	1,378	417	373	437	244	324	316	—
Hogs & pigs (10-States) 4/										
Inventory (thou. head) 1/	44,150	42,420	41,100	43,180	42,420	39,680	41,450	41,820	41,100	38,600
Breeding (thou. head) 1/	5,638	5,348	5,258	5,550	5,348	5,220	5,397	5,377	5,258	4,988
Market (thou. head) 1/	38,512	37,072	35,842	37,630	37,072	34,315	36,053	36,443	35,842	33,612
Farrowings (thou. head)	9,735	9,020	9,020	2,316	1,935	2,420	2,191	2,265	1,940	1/ 2,320
Pig crop (thou. head)	72,733	67,680	67,648	17,420	14,690	18,762	16,941	17,255	14,880	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live-weight. 3/ Beginning January 1984 prices are for 14-17 lbs.; January 1986 prices are for 14-18 lbs. 4/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 5/ Intentions. *Classes estimated. n.a. = not available.

Crops and Products

Table 17.—Supply and utilization

	Area			Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested									
	Mil. acres		Bu/acre					Mil. bu				\$/bu
Wheat												
1982/83	5.8	86.2	77.9	35.5	2,765	3,932	195	713	1,509	2,417	1,515	3.55
1983/84	30.0	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.53
1984/85*	18.6	79.2	66.9	38.8	2,595	4,003	410	743	1,424	2,578	1,425	3.38
1985/86*	18.8	75.6	64.7	37.5	2,425	3,864	325	760	900	1,985	1,879	3.16
1986/87*	--	--	--	--	2,178	4,062	485	685	1,100	2,270	1,792	2.25-2.50
	Mil. acres		lb/acre					Mil. cwt (rough equiv.)				\$/cwt
Rice												
1982/83	0.42	3.30	3.26	4,710	153.6	203.4	6/ 8.9	54.0	68.9	131.8	71.5	8.11
1983/84	1.74	2.19	2.17	4,598	99.7	171.9	6/ 5.6	49.1	70.3	125.0	46.9	8.76
1984/85*	.79	2.83	2.80	4,954	138.8	187.2	6/ 8.0	52.4	62.1	122.5	64.7	8.06
1985/86*	1.16	2.52	2.50	5,437	136.0	202.7	6/ 6.0	54.0	55.0	115.0	87.7	7.75
1986/87*	--	--	--	--	130.0	219.7	6/ 6.0	56.0	75.0	137.0	82.7	6.75-7.75
	Mil. acres		Bu/acre					Mil. bu				\$/bu
Corn												
1982/83	2.1	81.9	72.7	113.2	8,235	10,772	4,521	895	1,834	7,249	3,523	2.68
1983/84	32.2	60.2	51.5	81.1	4,175	7,701	3,818	975	1,902	6,694	1,006	3.25
1984/85*	3.9	80.5	71.9	106.7	7,674	8,684	4,116	1,055	1,865	7,036	1,648	2.62
1985/86*	5.4	83.3	75.1	118.0	8,865	10,516	4,100	1,130	1,400	6,630	3,886	2.35
1986/87*	--	--	--	--	7,575	11,462	4,200	1,150	1,625	6,975	4,487	1.80-2.05
	Mil. acres		Bu/acre					Mil. bu				\$/bu
Sorghum												
1982/83	0.7	16.0	14.1	59.1	835	1,082	475	10	210	695	387	2.52
1983/84	5.7	11.9	10.0	48.7	488	875	412	10	245	666	209	2.84
1984/85*	.6	17.3	15.4	56.4	866	1,075	553	19	297	869	206	2.39
1985/86*	.9	18.3	16.7	66.7	1,113	1,319	575	20	225	820	499	2.15
1986/87*	--	--	--	--	850	1,349	575	20	260	855	494	1.70-1.95
	Mil. acres		Bu/acre					Mil. bu				\$/bu
Barley												
1982/83	0.4	9.5	9.0	57.2	516	675	241	170	47	458	217	2.22
1983/84	1.1	10.4	9.7	52.3	509	733	283	169	92	544	189	2.50
1984/85*	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.26
1985/86*	.7	13.1	11.6	51.0	589	844	300	170	25	495	349	2.00
1986/87*	--	--	--	--	600	954	300	175	45	520	434	1.50-1.75
	Mil. acres		Bu/acre					Mil. bu				\$/bu
Oats												
1982/83	0.1	14.0	10.3	57.8	593	749	441	85	3	529	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.67
1984/85*	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.69
1985/86*	.1	13.3	8.1	63.6	519	724	450	80	2	532	192	1.25
1986/87*	--	--	--	--	530	747	450	85	2	537	210	1.00-1.25
	Mil. acres		Bu/acre					Mil. bu				\$/bu
Soybeans												
1982/83	--	70.9	69.4	31.5	2,190	2,444	7/ 86	1,108	905	2,099	345	5.69
1983/84	--	63.8	62.5	26.2	1,636	1,981	7/ 79	983	743	1,805	176	7.81
1984/85*	--	67.8	66.1	28.1	1,861	2,037	7/ 93	1,030	598	1,721	316	5.85
1985/86*	--	63.1	61.6	34.1	2,099	2,415	7/ 85	1,060	780	1,925	490	5.10
1986/87*	--	--	--	--	1,900	2,390	7/ 85	1,060	775	1,920	470	4.75-5.15
	Mil. lbs		B/					Mil. lbs				\$/lb
Soybean oil												
1982/83	--	--	--	--	12,041	13,144	--	9,858	2,025	11,883	1,261	20.6
1983/84	--	--	--	--	10,872	12,133	--	9,588	1,824	11,412	721	30.6
1984/85*	--	--	--	--	11,468	12,209	--	9,917	1,660	11,569	632	29.3
1985/86*	--	--	--	--	11,723	12,365	--	9,900	1,350	11,250	1,115	18.0
1986/87*	--	--	--	--	11,660	12,775	--	10,100	1,400	11,500	1,275	14.0-19.0
	Thou. tons		9/					Thou. tons				\$/ton
Soybean meal												
1982/83	--	--	--	--	26,714	26,889	--	19,306	7,109	26,415	474	187
1983/84	--	--	--	--	22,756	23,230	--	17,615	5,360	22,977	255	188
1984/85*	--	--	--	--	24,529	24,784	--	19,480	4,917	24,397	387	125
1985/86*	--	--	--	--	25,133	25,520	--	19,100	6,000	25,100	420	150
1986/87*	--	--	--	--	25,000	25,420	--	19,500	5,500	25,000	420	130-155

See footnotes at end of table.

Supply and utilization, continued

	Area			Yield	Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price
	Set aside	Planted	Harvested									
	3/					4/						5/
		Mill. acres		lb./acre				Mill. bales				¢/lb
Cotton 10/												
1982/83	1.6	11.3	9.7	590	12.0	18.6	—	5.5	5.2	10.7	7.9	59.1
1983/84	6.8	7.9	7.3	508	7.8	15.7	—	5.9	6.8	12.7	2.8	66.4
1984/85*	2.5	11.1	10.4	600	13.0	15.8	—	5.5	6.2	11.8	4.1	58.7
1985/86*	3.6	10.7	10.2	630	13.4	17.6	—	6.3	2.0	8.3	9.4	—
1986/87*	—	—	—	—	11.0	20.4	—	6.8	6.0	12.8	7.7	—

* May 9, 1986 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats; August 1 for cotton and rice; September 1 for soybeans, and October 1 for corn, sorghum, soybean, and soybean meal. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cut. of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIR, and acreage reduction programs. 4/ Includes imports. 5/ Season average. 6/ Statistical discrepancy. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Table 18.—Food grains

	Marketing year 1/			1985				1986		
	1982/83	1983/84	1984/85	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Wholesale prices										
Wheat, No. 1 HRW,										
Kansas City (\$/bu.) 2/	3.94	3.83	3.74	3.67	3.15	3.35	3.42	3.32	3.30	3.36
Wheat, DNS,										
Minneapolis (\$/bu.) 2/	3.95	4.21	3.70	3.55	3.01	3.42	3.45	3.38	3.32	3.33
Rice, S.W. La. (\$/cwt.) 3/	18.00	19.38	17.98	18.00	17.50	17.50	17.50	17.50	17.50	17.50
Wheat										
Exports (mil. bu.)	1,509	1,429	1,424	65	89	87	72	75	78	74
Mill grind (mil. bu.)	656	694	675	59	65	63	56	61	60	n.a.
Wheat flour production (mil. cwt.)	292	308	301	26	29	28	25	27	27	n.a.
Rice										
Exports (mil. cwt, rough equiv.)	68.9	69.1	61.0	5.89	6.07	4.39	4.22	4.05	2.60	n.a.
	Marketing year 1/			1984				1985		
	1982/83	1983/84	1984/85	June-Sept	Oct-Dec	Jan-Mar	Apr-May	June-Sept	Oct-Dec	Jan-Mar
Wheat										
Stocks, beginning (mil. bu.)	1,159	1,515	1,399	1,399	2,743	2,141	1,667	1,425.2	2,971.1	2,526.1
Domestic use:										
Food (mil. bu.)	616	643	650	212	167	165	105.5	222.8	177.0	166.0
Feed & seed (mil. bu.) 4/	318	469	504	395	59	44	0	355.6	24.7	11.0
Exports (mil. bu.)	1,509	1,429	1,424	645	374	266	139.1	326.6	247.3	266.1

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. n.a. = not available.

Table 19.—Cotton

	Marketing year 1/			1985				1986		
	1982/83	1983/84	1984/85	Mar	Oct	Nov	Dec	Jan	Feb	Mar
U.S. price, SLM,										
1-1/16 in. (cts./lb.) 2/	63.1	73.1	60.5	60.2	56.1	56.0	56.3	58.4	59.8	61.7
Northern Europe prices:										
Index (cts./lb.) 3/	76.7	87.6	69.2	67.3	49.0	48.0	51.8	51.8	54.5	52.3
U.S. M 1-3/32" (cts./lb.) 4/	78.0	87.1	73.9	73.7	68.6	67.7	69.1	69.1	70.1	71.7
U.S. mill consumption (thou. bales)	5,512.8	5,883.5	5,517.3	544.2	516.4	500.2	509.4	623.8	522.5	514.2
Exports (thou. bales)	5,206.8	6,786.0	6,201.3	648.5	218.0	234.7	196.0	186.0	192.9	—
Stocks, beginning (thou. bales)	6,632	7,937	2,775	8,110	5,035	8,056	11,203	12,797	12,626	11,946

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook "A" Index; average of five lowest priced of 10 selected growths. 4/ Memphis territory growths.

Table 20.—Feed grains

	Marketing year 1/			1985				1986		
	1982/83	1983/84	1984/85	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Wholesale prices										
Corn, No. 2 yellow, Chicago (\$/bu.)	2.81	3.46	2.79	2.84	2.26	2.46	2.50	2.51	2.49	2.45
Sorghum, No. 2 yellow, Kansas City (\$/cwt.)	4.80	5.22	4.46	4.58	3.62	3.75	3.97	3.95	3.80	3.82
Barley, feed, Minneapolis (\$/bu.)	1.76	2.48	2.09	—	1.41	1.49	1.60	1.57	—	—
Barley, malting, Minneapolis (\$/bu.)	2.53	2.84	2.55	2.51	2.10	2.27	2.29	2.28	2.20	2.34
Exports										
Corn (mil. bu.)	1,834	1,902	1,865	172	126	211	179	166	121	98
Feed grains (mil. metric tons) 2/	53.0	56.5	56.6	5.1	3.9	5.9	4.8	4.7	3.4	2.7

	Marketing year 1/			1984		1985			1986	
	1982/83	1983/84	1984/85	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov	Dec-Feb
Corn										
Stocks, beginning (mil. bu.)	2,537	3,523	1,006	2,145	1,006	6,631	4,623	2,836	1,648	8,615
Domestic use:										
Feed (mil. bu.)	4,521	3,818	4,116	511	1,294	1,183	1,026	612	1,210	1,315
Food, seed, ind. (mil. bu.)	898	973	1,065	250	250	242	254	280	272	259
Exports (mil. bu.)	1,834	1,902	1,865	379	506	584	479	296	418	465

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Aggregated data for corn, sorghum, oats, and barley.

Table 21.—Fats and oils

	Marketing year 1/			1985				1986		
	1982/83	1983/84	1984/85	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Soybeans										
Wholesale price, No. 1 yellow, Chicago (\$/bu.) 2/	6.11	7.78	5.88	5.92	5.07	5.05	5.21	5.36	5.29	5.37
Crushings (mil. bu.)	1,108.0	983	1,030.5	85.6	94.3	96.6	100.8	99.6	81.4	91.7
Exports (mil. bu.)	905.2	740.3	600.7	59.8	55.4	79.6	94.1	84.7	92.1	88.7
Stocks, beginning	30.6	58.6	35.3	65.8	25.7	92.8	113.5	119.8	124.6	97.4
Soybean oil										
Wholesale price, crude, Decatur (cts./lb.)	20.6	30.55	29.50	31.40	20.71	20.62	21.39	20.63	18.64	17.56
Production (mil. lb.)	12,040.4	10,872.0	10,614.5	945.9	1,040.3	1,053.1	1,095.7	1,085.8	894.9	1,006.1
Domestic disp. (mil. lb.)	9,857.3	9,598	9,777.9	769.4	918.9	840.8	862.4	807.2	780.4	851.5
Exports (mil. lb.)	2,024.7	1,814	1,557.1	184.9	125.4	38.1	74.3	80.6	100.7	92.8
Stocks, beginning (mil. lb.)	1,102.5	1,261	720.5	723.9	640.1	636.1	810.4	969.4	1,167.4	1,181.1
Soybean meal										
Wholesale price, 44% protein, Decatur (\$/ton)	187.19	188.21	117.08	125.90	138.30	142.50	145.00	153.25	152.25	163.70
Production (thou. ton)	26,713.6	22,756.2	22,729.1	2,023.6	2,218.1	2,287.7	2,379.9	2,343.8	1,925.2	2,160.4
Domestic disp. (thou. ton)	19,306.0	17,541.0	18,479.7	1,496.8	1,888.8	1,621.8	1,752.2	1,739.5	1,397.2	1,406.0
Exports (thou. ton)	7,108.7	5,436.1	4,504.8	416.3	397.8	615.1	638.5	590.3	619.1	649.3
Stocks, beginning (thou. ton)	175.2	474	255.4	334.1	386.9	318.4	369.2	358.4	372.4	281.3
Margarine, wholesale price, Chicago (cts./lb.)										
	41.1	46.3	55.4	54.00	45.69	44.75	43.55	43.99	42.66	41.53

1/ Beginning September 1 for soybeans; October 1 for soybean meal and oil; calendar year for margarine. 2/ Beginning April 1, 1982, prices based on 30-day delivery, using upper end of the range.

Table 22.—Fruit

	Calendar years											
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 F
Citrus												
Production (thou. ton)	14,586	14,788	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,789	10,460 5/	11,245
Per capita consumption (lbs) 1/	126.2	123.6	119.9	113.0	113.7	119.1	112.1	112.9	127.5	104.9	n.a.	n.a.
Non citrus												
Production (thou. tons)	12,384	11,846	12,274	12,460	13,689	15,152.8	12,961	14,217	13,704	13,769	13,455	n.a.
Per capita consumption (lbs) 1/	102.6	99.2	100.3	101.4	105.9	106.2	109.6 6/	103.8	7/ 93.6	8/ 93.6	n.a.	n.a.
	1985						1986					
	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Fob shipping point prices												
Apples (\$/cwt) 2/	16.40	16.50	16.25	15.63	14.13	16.17	14.50	14.30	14.00	13.60	15.00	14.85
Pears (\$/box) 3/	15.50	21.30	23.50	n.a.	n.a.	n.a.	14.00	14.00	14.00	14.00	15.59	15.50
Oranges (\$/box) 4/	16.70	17.00	16.50	15.90	15.80	13.90	13.70	14.00	15.30	14.10	13.20	12.60
Grapefruit (\$/box) 4/	11.70	13.50	14.80	15.10	14.50	14.44	11.50	10.70	11.20	11.20	11.10	11.60
Stocks, ending												
Fresh apples (mil. lbs.)	910.4	485.1	291.2	132.4	34.4	1,712.2	3,668.3	3,342.5	2,724.7	2,125.2	1,550.2	1,039.3
Fresh pears (mil. lbs.)	34.1	10.3	1.5	5.1	92.5	398.7	298.9	222.2	183.2	142.9	101.3	71.6
Frozen fruits (mil. lbs.)	458.5	442.2	522.4	707.0	733.8	760.1	819.9	788.9	720.7	656.5	597.1	542.2
Frozen orange juice (mil. lbs.)	1,188.6	1,229.5	1,063.7	1,036.1	912.4	883.8	778.8	656.0	684.4	888.4	966.8	910.9

1/ Per capita consumption of both fresh and processed fruit in fresh weight equivalent. 2/ Red Delicious, Washington, extra fancy, carton tray pack, 80-115's. 3/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 4/ F.O.B. packed fresh. 5/ As of May 1, 1986. 6/ Excludes canned pineapples and pineapple juice. 7/ Excludes canned pineapple, canned apple, and pineapple juice. 8/ Excludes canned apples, cranberries, pineapples, and canned apple and pineapple juice. n.a. = not available.

Table 23.—Vegetables

	Calendar years									
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Production										
Total vegetables (1,000 cwt) 1/	369,915	402,936	382,165	413,925	381,370	379,123	431,515	403,520	443,131	391,290
Fresh (1,000 cwt) 1/ 2/	173,800	176,541	182,563	190,859	190,228	194,694	207,924	197,919	215,236	209,722
Processed (tons) 3/	9,808,750	11,319,750	9,980,100	11,153,300	9,557,100	9,221,460	11,179,990	10,270,090	11,394,780	9,078,430
Mushrooms (1,000 lbs)	151,247	191,080	229,538	255,846	275,092	319,132	337,234	388,075	419,913	n.a.
Potatoes (1,000 cwt)	357,666	355,334	366,314	342,447	302,857	338,591	355,131	333,911	362,612	404,131
Sweetpotatoes (1,000 cwt)	13,275	11,885	13,115	13,370	10,953	12,799	14,653	12,083	12,986	14,416
Dry edible beans (1,000 cwt)	9,364	7,880	9,840	10,383	14,658	19,486	12,670	7,781	11,617	11,207
	1985					1986				
	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Shipments										
Fresh (1,000 cwt) 4/	16,568	17,974	32,205	29,244	25,974	16,414	15,002	18,318	14,708	14,021
Potatoes (1,000 cwt)	11,705	12,853	15,225	10,166	8,898	7,474	7,850	10,067	9,646	10,147
Sweetpotatoes (1,000 cwt)	311	236	210	135	115	109	332	492	817	504

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop; all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop; all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. n.a. = not available.

Table 24.—Other commodities

	Annual					1985				1986
	1982	1983	1984	1985	1986 F	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar
Sugar										
Production 1/	5,936	5,682	5,888	5,969	5,961	1,586	727	683	2,992	1,671
Deliveries 1/	9,153	8,812	8,454	8,035	8,100	1,910	1,972	2,150	2,003	1,893
Stocks, ending 1/	3,068	2,570	3,005	3,126	2,475	3,417	2,686	1,745	3,126	3,387
Coffee										
Composite green price N.Y. (cts./lb.)	132.00	131.51	142.95	137.46	210.00	137.50	134.69	124.83	152.81	215.33
Imports, green bean equiv. (million lbs.) 2/	2,352	2,259	2,411	2,550	2,450	673	606	659	612	786
	Annual			1985				1986		
	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Tobacco										
Prices at auctions 3/										
Flue-cured (cts./lb.)	1.78	1.81	1.72	—	1.80	1.66	—	—	—	—
Burley (cts./lb.)	1.77	1.88	—	1.82	—	—	1.60	1.60	1.58	1.48
Domestic consumption 4/										
Cigarettes (bil.)	600.0	600.4	592.0	54.8	70.6	49.9	48.0	35.3	43.2	—
Large cigars (mil.)	360.5	349.1	318.5	248.4	292.8	273.9	238.1	225.6	198.9	—

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Green and processed coffee. 3/ Crop year, July-June for flue-cured, October-September for burley. 4/ Taxable removals.

Table 25.—World supply and utilization of major crops, livestock and products

	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85 E	1985/86 P
	Mil. units						
Wheat							
Area (hectare)	227.6	236.9	238.7	237.5	229.1	231.2	229.6
Production (metric ton)	422.8	442.9	448.4	479.1	490.9	515.2	503.2
Exports (metric ton) 1/	86.0	94.1	101.3	98.7	102.0	106.1	87.6
Consumption (metric ton) 2/	443.5	445.7	441.5	467.9	486.3	500.0	493.5
Ending stocks (metric ton) 3/	80.4	78.2	85.0	96.3	101.0	116.2	125.6
Coarse grains							
Area (hectare)	341.1	342.4	350.2	339.2	334.2	338.9	342.7
Production (metric ton)	741.5	732.9	769.8	779.1	685.5	808.0	842.8
Exports (metric ton) 1/	98.8	108.0	96.6	89.9	91.9	101.7	87.3
Consumption (metric ton) 2/	740.3	743.0	739.8	751.4	761.5	778.8	777.9
Ending stocks (metric ton) 3/	91.6	82.8	112.9	145.5	72.6	101.7	166.5
Rice, milled							
Area (hectare)	143.1	144.4	145.1	141.2	144.3	144.2	143.1
Production (metric ton)	253.9	271.0	280.6	285.7	308.0	318.7	315.0
Exports (metric ton) 4/	12.7	13.1	11.8	11.9	12.6	11.4	11.7
Consumption (metric ton) 2/	257.8	272.3	281.5	289.6	308.1	314.0	312.9
Ending stocks (metric ton) 3/	23.4	22.1	21.3	17.3	17.3	21.9	23.9
Total grains							
Area (hectare)	711.8	723.8	734.0	717.9	707.6	714.3	715.4
Production (metric ton)	1,418.2	1,446.8	1,498.8	1,543.9	1,484.4	1,641.9	1,661.0
Exports (metric ton) 1/	197.5	215.2	209.7	200.5	206.5	219.2	186.6
Consumption (metric ton) 2/	1,441.9	1,461.0	1,462.8	1,508.9	1,555.9	1,592.8	1,584.3
Ending stocks (metric ton) 3/	195.4	183.2	219.2	259.1	190.9	239.8	316.0
Oilseeds							
Crush (metric ton)	134.9	132.9	138.3	143.5	136.7	150.4	152.5
Production (metric ton)	170.1	155.8	169.4	178.0	165.0	190.2	192.7
Exports (metric ton)	35.9	32.1	35.8	35.0	33.0	32.8	34.8
Ending stocks (metric ton)	19.4	20.5	19.0	20.5	15.8	20.6	25.0
Meals							
Production (metric ton)	92.9	90.8	94.1	98.0	93.0	101.5	103.3
Exports (metric ton)	26.5	25.9	28.9	31.6	29.6	32.2	33.0
Oils							
Production (metric ton)	39.7	40.0	41.6	43.4	42.3	46.3	48.5
Exports (metric ton)	12.8	12.5	13.3	14.3	14.3	16.2	17.1
Cotton							
Area (hectare)	32.2	32.4	33.2	31.9	31.4	34.3	32.1
Production (bale)	65.2	64.8	70.8	67.5	67.7	87.6	77.9
Exports (bale)	23.1	19.7	20.2	19.4	19.2	20.3	19.1
Consumption (bale)	65.3	65.9	65.5	68.0	69.0	69.4	72.9
Ending stocks (bale)	24.0	24.1	25.4	25.0	24.6	42.6	47.3
	1980	1981	1982	1983	1984	1985	1986 F
Red meat							
Production (mil. metric tons)	93.3	93.6	93.9	96.5	98.2	101.2	101.3
Consumption (mil. metric tons)	92.0	91.8	92.2	94.5	96.0	99.3	99.5
Exports (mil. metric tons) 1/	5.5	5.7	5.8	5.9	5.9	6.3	6.5
Poultry							
Production (mil. metric tons)	21.3	22.4	23.0	23.5	24.3	25.3	26.1
Consumption (mil. metric tons)	21.4	22.1	22.7	23.4	24.0	24.9	25.7
Exports (mil. metric tons) 1/	1.1	1.5	1.4	1.3	1.2	1.1	1.1
Dairy							
Milk production	405.0	402.3	398.1	413.3	412.6	416.8	420.5

E = Estimated. P = Projected. 1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1980 data correspond with 1979/80, etc.

U.S. Agricultural Trade

Table 26.—Prices of principal U.S. agricultural trade products

	Annual			1985				1986		
	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	4.30	4.17	3.73	3.97	3.51	3.67	3.77	3.63	3.57	3.71
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	3.49	3.50	2.89	3.10	2.53	2.77	2.81	2.75	2.67	2.57
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	3.34	3.00	2.64	2.99	2.20	2.46	2.56	2.51	2.46	2.42
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	7.31	7.38	5.83	6.28	5.05	5.40	5.56	5.72	5.63	5.65
Soybean oil, Decatur (cts./lb.)	23.51	30.75	27.03	31.35	20.61	20.33	21.26	20.27	18.34	17.41
Soybean meal, Decatur (\$/ton)	200.91	166.80	127.15	125.76	139.67	141.88	145.95	152.55	153.28	163.19
Cotton, 8 market avg. spot (cts./lb.)	68.68	68.37	58.55	60.18	56.14	56.03	56.25	58.39	59.81	61.75
Tobacco, avg. price at auction (cts./lb.)	173.96	170.66	174.35	178.14	175.49	172.39	163.65	163.65	162.27	159.39
Rice, f.o.b. mill, Houston (\$/cwt.)	19.39	19.47	18.57	18.75	18.25	18.25	18.25	17.88	17.50	17.31
Inedible tallow, Chicago (cts./lb.)	13.41	17.47	14.33	17.50	11.50	11.31	11.38	12.00	11.81	9.38
Import commodities										
Coffee, N.Y. spot (\$/lb.)	1.33	1.46	1.42	1.41	1.37	1.55	1.75	2.41	2.26	2.35
Rubber, N.Y. spot (cts./lb.)	56.19	49.70	41.91	41.45	42.92	42.14	40.28	40.74	42.76	41.98
Cocoa beans, N.Y. (\$/lb.)	.92	1.06	.99	.99	1.03	.98	1.02	1.01	.86	.91

Table 27.—Indexes of nominal and real trade-weighted dollar exchange rates

	1985								1986			
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1980=100												
Total U.S. trade												
Nominal	156	155	149	146	148	140	137	136	134	129	126	126
Real	157	156	150	148	149	141	138	137	135	130	127	127
April 1971=100												
Agricultural trade												
Nominal 1/	1,861	2,042	2,217	2,392	2,583	2,830	3,083	3,183	3,544	4,093	4,495	4,500
Real 2/	105	106	103	102	103	99	99*	91*	90*	89*	87*	87*
Soybeans												
Nominal 1/	190	197	203	201	210	210	229	114	112	107	105	105
Real 2/	102	102	99	97	98	92	91*	84*	82*	79*	77*	77*
Wheat												
Nominal 1/	9,996	11,012	11,996	13,008	14,116	15,607	17,029	18,368	20,580	23,953	26,425	26,457
Real 2/	110	112	111	110	111	109	109*	103*	102*	103*	103*	101*
Corn												
Nominal 1/	1,740	1,905	2,067	2,227	2,403	2,627	2,865	2,903	3,227	3,720	4,081	4,086
Real 2/	105	105	102	100	101	97	96*	86*	85*	82*	80*	79*
Cotton												
Nominal 1/	213	213	213	213	215	213	215	216	216	214	228	227
Real 2/	102	101	100	100	100	98	97*	97*	97*	95*	94*	94*

1/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 2/ Real values are computed in the same way as the nominal series, adjusted for CPI changes in the countries involved.

*Preliminary; assumes the same rate of CPI increase/decrease as the previous six months.

Table 28.—Trade balance

	Fiscal years*								Oct-Mar*	Mar
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1986
\$ million										
Exports										
Agricultural	27,289	31,979	40,481	43,780	39,095	34,769	38,027	31,187	15,153	2,400
Nonagricultural	104,270	135,839	169,846	185,423	176,310	159,373	170,014	179,253	87,689	15,949
Total 1/	131,559	167,818	210,327	229,203	215,405	194,142	208,041	210,440	102,842	18,349
Imports										
Agricultural	13,886	16,186	17,076	17,218	15,481	16,271	18,916	19,740	10,500	1,867
Nonagricultural	152,095	177,424	223,590	237,469	233,353	230,629	297,736	313,863	170,737	30,115
Total 2/	165,981	193,610	240,666	254,687	248,834	246,900	316,652	333,603	181,237	31,982
Trade balance										
Agricultural	13,403	15,793	23,205	26,562	23,614	18,498	19,111	11,447	4,653	533
Nonagricultural	-47,825	-41,585	-53,744	-52,046	-57,043	-71,256	-127,722	-134,610	-83,048	-14,166
Total	-34,422	-25,792	-30,539	-25,484	-33,429	-52,758	-108,611	-123,163	-78,395	-13,633

*Fiscal years begin October 1 and end September 30. Fiscal year 1985 began Oct. 1, 1984 and ended Sept. 30, 1985.

Table 29.—U.S. agricultural exports and imports

	Fiscal years*			Oct-Mar*	Mar	Fiscal years*			Oct-Mar*	Mar
	1983	1984	1985	1986	1986	1983	1984	1985	1986	1986
	Thousand units					\$ Million				
Exports										
Animals, live (no.)	763	754	996	272	26	264	276	255	208	11
Meats & preps., excl. poultry (mt)	412	422	427	216	32	926	929	906	483	79
Dairy products (mt)	339	418	422	244	42	349	393	413	207	39
Poultry meats (mt)	250	225	234	126	24	281	280	257	136	25
Fats, oils, & greases (mt)	1,443	1,395	1,217	702	83	593	703	608	273	30
Hides & skins incl. furskins	—	—	—	—	—	997	1,318	1,325	723	139
Cattle hides, whole (no.)	21,989	24,283	25,456	12,535	2,161	709	1,010	1,019	540	97
Mink pelts (no.)	2,446	2,551	2,222	1,542	487	62	67	60	39	11
Grains & feeds (mt)	102,016	108,194	93,829	42,913	5,559	15,050	17,304	13,270	5,511	761
Wheat (mt)	36,701	41,699	28,522	11,915	1,834	5,910	6,497	4,263	1,645	255
Wheat flour (mt)	1,529	1,071	766	544	103	256	234	164	94	20
Rice (mt)	2,276	2,293	1,972	796	113	874	897	677	296	42
Feed grains, excl. products (mt)	53,481	55,285	54,931	25,109	2,644	6,496	8,129	6,775	2,695	293
Feeds & fodders (mt)	7,171	7,021	6,543	4,022	786	1,193	1,216	1,005	610	122
Other grain products (mt)	859	825	1,095	526	79	321	331	385	171	28
Fruits, nuts, and preps. (mt)	2,120	1,931	1,907	1,022	180	1,660	1,594	1,687	902	149
Fruit juices incl. froz. (hl)	5,803	5,598	4,641	1,819	345	222	223	200	74	13
Vegetables & preps. (mt)	1,578	1,527	1,420	771	131	990	999	946	526	90
Tobacco, unmanufactured (mt)	245	227	257	151	23	1,487	1,433	1,588	883	132
Cotton, excl. linters (mt)	1,136	1,481	1,277	265	41	1,683	2,395	1,945	410	64
Seeds (mt)	275	252	300	163	25	333	326	353	248	32
Sugar, cane or beet (mt)	141	285	355	174	33	38	74	65	31	5
Oilseeds & products (mt)	34,322	26,961	23,806	17,559	3,149	8,721	8,602	6,195	3,934	707
Oilseeds (mt)	26,039	20,466	17,886	13,701	2,447	6,332	6,254	4,324	2,904	517
Soybeans (mt)	24,522	19,265	16,620	13,463	2,415	5,866	5,734	3,876	2,797	502
Protein meal (mt)	6,688	5,060	4,609	3,250	593	1,486	1,217	854	643	125
Vegetable oils (mt)	1,596	1,435	1,311	608	109	902	1,131	1,018	387	65
Essential oils (mt)	10	11	12	4	1	88	96	105	56	14
Other	—	—	—	—	—	345	310	319	145	28
Total	—	—	—	—	—	34,769	38,027	31,187	15,153	2,400
Imports										
Animals, live (no.)	1,553	1,907	2,120	1,110	139	555	596	569	389	49
Meats & preps., excl. poultry (mt)	938	905	1,123	551	89	2,092	1,931	2,214	1,102	180
Beef & veal (mt)	661	550	674	326	51	1,387	1,165	1,295	604	94
Pork (mt)	251	328	416	203	35	638	703	847	442	77
Dairy products (mt)	299	382	418	223	26	709	757	763	413	60
Poultry and products	—	—	—	—	—	91	122	93	47	7
Fats, oils, & greases (mt)	11	18	21	10	2	7	13	18	8	2
Hides & skins, incl. furskins	—	—	—	—	—	191	216	240	112	23
Wool, unmanufactured (mt)	38	59	43	27	4	124	193	145	84	14
Grains & feeds (mt)	1,611	1,805	2,070	1,039	150	448	534	604	334	51
Fruits, nuts, & preps.,										
ex juices (mt)	3,597	4,036	4,483	2,295	483	1,386	1,634	1,891	996	205
Bananas & plantains (mt)	2,516	2,727	3,022	1,529	262	585	666	752	373	65
Fruit juices (hl)	22,166	27,247	35,112	15,463	2,819	479	671	995	380	64
Vegetables & preps. (mt)	1,693	2,093	2,140	1,089	210	1,138	1,314	1,347	743	135
Tobacco, unmanufactured (mt)	239	190	191	96	18	734	563	556	288	54
Cotton, unmanufactured (mt)	8	32	31	20	4	7	17	17	11	1
Seeds (mt)	85	82	92	51	14	91	97	91	64	13
Nursery stock & cut flowers	—	—	—	—	—	228	292	318	184	33
Sugar, cane or beet (mt)	2,564	2,829	2,338	994	188	974	1,144	912	345	62
Oilseeds & products (mt)	1,021	1,137	1,271	782	163	493	799	784	362	67
Oilseeds (mt)	185	223	253	94	27	80	95	98	34	8
Protein meal (mt)	87	118	159	71	10	14	21	17	7	1
Vegetable oils (mt)	749	797	859	617	126	399	683	670	321	58
Beverages excl. fruit juices (hl)	12,426	14,120	15,494	7,232	1,229	1,346	1,547	1,622	880	140
Coffee, tea, cocoa, spices (mt)	1,701	1,776	1,868	1,007	166	3,984	4,777	4,983	2,997	576
Coffee, incl. products (mt)	1,061	1,128	1,128	638	103	2,832	3,300	3,244	2,103	419
Cocoa beans & products (mt)	464	451	539	269	42	829	1,058	1,285	661	106
Rubber & allied gums (mt)	654	809	799	430	79	582	854	680	317	61
Other	—	—	—	—	—	717	844	900	445	73
Total	—	—	—	—	—	16,373	18,916	19,740	10,500	1,867

*Fiscal years begin October 1 and end September 30. Fiscal year 1985 began Oct. 1, 1984 and ended Sept. 30, 1985. — Not available.

Table 30.—U.S. agricultural exports by regions

Region & country	Fiscal years ^a			Oct-Mar ^a	Mar	Change from year ^a earlier				
	1983	1984	1985	1986	1986	1983	1984	1985	1986	Mar
	\$ Mil.					Percent				
Western Europe	10,148	9,265	7,184	4,432	685	-17	-9	-22	-4	5
European Community	7,628	6,716	5,336	3,435	544	-14	-12	-21	1	18
Belgium-Luxembourg	811	836	470	246	43	-13	3	-44	-20	130
France	517	510	396	278	27	-22	-1	-22	6	-41
Germany, Fed. Rep.	1,454	1,260	900	664	94	-8	-13	-29	11	-2
Italy	799	771	677	453	74	-23	-4	-12	0	16
Netherlands	2,821	2,227	1,927	1,273	225	-14	-21	-13	7	67
United Kingdom	821	790	628	367	55	-13	-4	-21	-2	-3
Other Western Europe	2,519	2,548	1,849	998	141	-23	1	-27	-17	-27
Portugal	638	702	502	204	41	9	10	-28	-36	-33
Spain, Incl. Canary Islands	1,199	1,232	826	554	60	-37	3	-33	-2	-25
Switzerland	355	311	237	77	18	5	-12	-24	-51	-39
Eastern Europe	827	741	532	318	70	-10	-10	-28	-13	53
Germany Dem. Rep.	123	132	81	45	10	-46	7	-39	-37	3,709
Poland	232	197	126	19	3	29	-15	-36	-77	-80
Yugoslavia	249	180	137	85	20	39	-28	-24	-9	41
Romania	115	155	88	78	21	-21	35	-43	39	102
USSR	983	2,512	2,509	908	118	-58	156	0	-53	-57
Asia	13,588	15,209	11,934	5,813	988	-4	12	-22	-16	4
West Asia (Mideast)	1,482	1,865	1,452	657	92	0	26	-22	-25	-15
Turkey	28	222	129	73	16	-74	693	-42	-34	473
Iraq	323	423	371	184	20	139	31	-12	-23	-13
Israel	293	351	300	131	20	-14	20	-15	-23	-45
Saudi Arabia	446	497	381	154	22	-6	11	-23	-25	-20
South Asia	1,170	867	600	282	74	64	-26	-31	-25	8
Bangladesh	153	157	205	41	14	25	3	31	-77	-47
India	762	376	129	43	6	146	-51	-66	-46	-30
Pakistan	215	285	229	167	52	-2	33	-20	84	71
East & Southeast Asia	10,936	12,477	9,882	4,874	822	-8	14	-21	-14	6
China	546	692	239	66	17	-70	27	-65	-59	165
Taiwan	1,237	1,409	1,342	634	108	6	14	-5	-22	8
Japan	5,888	6,935	5,663	2,908	445	3	18	-18	-12	-6
Korea, Rep.	1,713	1,816	1,400	694	119	7	6	-23	-2	8
Hong Kong	344	407	396	200	32	-15	18	-3	-2	19
Indonesia	410	438	204	68	13	-3	7	-53	-38	-18
Philippines	380	300	285	143	38	19	-21	-5	19	126
Africa	2,272	2,868	2,529	1,117	159	-7	26	-12	-19	-24
North Africa	1,452	1,542	1,208	782	112	4	6	-22	7	7
Morocco	225	341	156	93	19	33	52	-54	4	301
Algeria	203	162	221	156	22	-8	-20	36	19	6
Egypt	911	882	766	520	63	1	-3	-13	12	-18
Sub-Sahara	821	1,327	1,320	335	47	-22	62	-1	-48	-55
Nigeria	332	345	367	67	4	-38	4	6	-69	-87
Rep. S. Africa	130	525	189	29	7	-2	304	-64	-81	-38
Latin America & Caribbean	4,858	5,279	4,567	1,743	246	-2	9	-13	-32	-43
Brazil	400	438	557	230	16	-31	10	27	-43	-69
Caribbean Islands	774	827	771	362	66	1	7	-7	-5	5
Central America	356	396	358	154	27	4	11	-10	-6	-5
Colombia	256	220	238	78	15	-6	-14	8	-37	-51
Mexico	1,777	1,966	1,566	553	68	19	11	-20	-42	-61
Peru	258	227	106	55	11	-17	-12	-53	-21	108
Venezuela	617	778	721	202	28	-17	26	-7	-43	-47
Canada	1,870	1,936	1,727	721	117	0	4	-11	-18	-17
Oceania	224	216	204	101	17	-24	-4	-6	-23	21
Total	34,769	38,027	31,187	15,153	2,400	-11	9	-18	-19	-12

^aFiscal years begin October 1 and end September 30. Fiscal year 1985 began Oct. 1, 1984 and ended Sept. 30, 1985.

Note: Adjusted for transshipments through Canada.

Farm Income

Table 31.—Farm income statistics

	Calendar years										
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985 p	1986 F
	Billion dollars										
1. Farm receipts	96.4	97.5	114.1	133.7	142.0	144.6	145.5	138.8	144.9	144 to 148	131 to 137
Crops (incl. net CCC loans)	49.0	48.6	53.0	62.3	71.8	72.9	72.7	66.8	69.1	73 to 75	60 to 64
Livestock	46.3	47.6	59.2	69.2	68.0	69.2	70.3	69.4	72.7	68 to 70	67 to 71
Farm related 1/	1.1	1.2	1.9	2.2	2.3	2.5	2.6	2.5	3.0	2 to 4	2 to 4
2. Direct Government payments	0.7	1.8	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7 to 9	10 to 13
Cash payments	0.7	1.8	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7 to 9	9 to 12
Value of PIR commodities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0	0 to 3
3. Total gross farm income	102.9	108.8	128.4	150.7	149.6	166.0	161.6	150.6	174.0	163 to 166	152 to 156
4. Gross cash income (1+2) 2/	97.2	99.3	117.1	135.1	143.3	146.5	149.0	148.1	153.3	152 to 155	145 to 149
5. Nonmoney income 3/	7.3	8.4	9.2	10.5	12.2	13.7	14.0	13.1	12.9	11 to 13	10 to 12
6. Value of inventory change	-1.5	1.1	2.1	5.0	-5.9	5.8	-1.4	-10.6	7.8	-4 to -1	-6 to -2
7. Cash expenses 4/	67.8	72.0	82.6	98.1	106.1	110.7	110.7	109.8	114.1	109 to 111	101 to 105
8. Total expenses	82.7	88.9	101.0	119.0	129.4	136.1	136.9	135.6	139.5	133 to 135	124 to 128
9. Net cash income (4-7)	29.4	27.3	34.6	37.0	37.2	35.8	38.3	38.3	39.2	43 to 46	42 to 46
10. Net farm income (3-8)	20.2	19.9	27.4	31.7	20.2	29.8	24.6	15.0	34.5	29 to 32	26 to 30
Deflated (1982\$)	32.0	29.5	38.0	40.3	23.5	31.7	24.6	14.4	31.9	26 to 29	23 to 26
11. Off-farm income	26.7	26.1	29.7	33.8	35.1	36.9	37.9	38.8	40.0	40 to 42	40 to 44
12. Loan changes 5/: Real estate	5.2	7.6	7.6	13.0	9.4	9.3	4.0	2.5	-0.8	-5 to -4	-5 to -1
13. 5/: Nonreal estate	6.0	6.8	8.3	10.9	5.9	6.2	3.3	1.0	-0.7	-4 to -3	-3 to 1
14. Rental income plus monetary change	4.0	4.1	4.7	5.7	5.8	6.0	6.0	4.9	5.7	4 to 6	3 to 6
15. Capital expenditures 5/	14.0	15.0	17.9	19.9	18.0	16.8	13.7	13.0	12.5	11 to 13	9 to 13
16. Net cash flow (9+12+13+14-15)	30.6	30.8	37.2	46.7	40.4	40.6	37.9	33.6	31.0	29 to 32	31 to 35

P=preliminary. F=forecast. 1/ Income from machine hire, custom work, sales of forest products, and other misc. cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households.

Table 32.—Cash receipts from farming

	Annual						1985				1986	
	1980	1981	1982	1983	1984	1985	Feb	Oct	Nov	Dec	Jan	Feb
	\$ MIL.											
Farm marketings and CCC loans 1/	139,757	142,089	142,938	135,505	143,031	145,631	10,279	15,889	16,862	15,543	13,692	9,706
Livestock and products	67,990	69,151	70,268	69,423	72,781	68,803	5,786	5,686	6,022	5,615	5,357	5,317
Meat animals	41,231	39,748	40,917	38,894	40,821	38,294	3,440	3,124	3,223	3,208	2,866	2,831
Dairy products	16,364	18,095	18,232	18,759	17,929	17,916	1,447	1,480	1,425	1,402	1,513	1,594
Poultry and eggs	9,161	9,951	9,556	9,975	12,123	10,711	794	967	1,101	888	839	787
Other	1,233	1,357	1,560	1,795	1,909	1,882	105	115	273	117	140	104
Crops	71,768	72,937	72,670	66,081	70,252	76,827	4,493	10,203	10,840	9,928	8,334	4,389
Food grains	10,402	11,620	11,469	9,733	9,569	10,070	424	1,321	691	610	748	423
Feed crops	18,306	17,774	17,232	15,364	15,744	22,930	1,232	2,793	4,127	4,193	3,429	1,226
Cotton (lint and seed)	4,476	4,551	4,932	3,713	3,217	4,130	445	783	899	826	1,037	384
Tobacco	2,671	3,250	3,342	2,831	2,841	2,670	54	432	168	482	176	85
Oil-bearing crops	15,491	13,853	13,813	13,505	13,747	12,753	607	2,499	2,438	1,835	1,547	618
Vegetables and melons	7,299	8,773	8,113	7,971	9,501	8,314	529	805	435	383	619	491
Fruits and tree nuts	6,557	6,574	6,806	5,959	6,650	7,030	626	783	835	607	213	601
Other	6,558	6,544	6,967	7,007	8,981	8,930	576	787	1,248	991	565	561
Government payments	1,286	1,932	3,492	9,295	8,430	7,687	1,452	101	-3	932	29	634
Total	141,043	144,021	146,430	144,800	151,461	153,318	11,731	15,990	16,859	16,475	13,721	10,340

1/ Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Table 33.—Cash receipts from farm marketings, by States

State	Livestock and Products				Crops 1/				Total 1/			
	1984	1985	Jan 1986	Feb 1986	1984	1985	Jan 1986	Feb 1986	1984	1985	Jan 1986	Feb 1986
	\$ Mil. 2/											
North Atlantic												
Maine	238	190	23	21	145	101	9	10	383	292	32	31
New Hampshire	63	57	7	6	26	24	3	3	89	81	10	9
Vermont	305	279	32	30	18	16	1	1	323	295	34	31
Massachusetts	109	99	11	10	178	148	15	7	287	247	26	17
Rhode Island	12	10	1	1	39	36	2	2	50	46	3	3
Connecticut	181	149	10	16	120	114	34	5	300	263	44	22
New York	1,591	1,387	162	151	645	511	48	40	2,236	1,898	209	191
New Jersey	112	101	12	11	313	286	19	16	425	387	31	27
Pennsylvania	1,879	1,608	179	163	734	675	103	73	2,613	2,283	282	236
North Central												
Ohio	1,348	1,084	109	112	1,444	1,318	305	116	2,792	2,402	414	228
Indiana	1,456	1,163	123	122	1,608	1,193	246	176	3,064	2,357	369	298
Illinois	1,804	1,649	172	156	3,654	3,350	965	298	5,458	4,999	1,137	454
Michigan	1,078	922	97	95	1,066	1,022	174	81	2,144	1,944	271	176
Wisconsin	3,409	3,031	317	300	794	582	94	42	4,203	3,612	412	342
Minnesota	2,716	2,392	252	234	2,074	1,739	400	152	4,790	4,131	653	386
Iowa	4,136	3,399	378	296	3,223	2,430	944	306	7,359	5,829	1,321	603
Missouri	1,787	1,530	160	165	1,156	733	242	98	2,943	2,263	402	262
North Dakota	551	501	69	66	1,362	1,278	248	123	1,914	1,779	317	189
South Dakota	1,477	1,328	156	161	845	781	129	60	2,322	2,109	284	221
Nebraska	3,811	3,459	298	276	1,809	1,363	626	186	5,620	4,822	924	463
Kansas	3,058	2,776	292	285	1,933	1,681	299	116	4,991	4,457	592	401
Southern												
Delaware	331	268	32	25	112	72	6	6	444	340	38	31
Maryland	688	582	66	60	279	213	16	14	967	794	82	74
Virginia	930	790	76	71	535	344	35	22	1,465	1,133	111	93
West Virginia	151	130	13	12	29	31	5	4	180	161	19	16
North Carolina	1,588	1,321	151	315	1,841	1,174	79	33	3,429	2,495	230	348
South Carolina	356	280	33	29	549	400	38	17	904	680	71	46
Georgia	1,583	1,228	134	119	1,401	977	82	40	2,985	2,205	217	159
Florida	921	781	91	88	2,780	2,319	270	296	3,701	3,100	361	384
Kentucky	1,239	962	91	69	569	797	142	97	1,808	1,760	233	166
Tennessee	821	750	78	79	547	571	82	33	1,368	1,321	160	112
Alabama	1,203	965	104	104	544	358	68	29	1,747	1,324	172	133
Mississippi	887	764	80	74	537	530	159	55	1,425	1,294	239	129
Arkansas	1,601	1,305	130	126	889	737	172	50	2,490	2,042	301	179
Louisiana	407	362	37	33	618	438	184	81	1,025	801	221	119
Oklahoma	1,477	1,380	128	113	629	731	93	59	2,106	2,111	221	172
Texas	4,977	4,158	311	395	2,775	2,752	640	343	7,753	6,909	951	738
Western												
Montana	566	476	82	67	530	352	48	23	1,096	828	130	90
Idaho	740	658	73	67	1,044	737	76	42	1,784	1,395	150	109
Wyoming	361	273	38	36	65	55	9	6	426	328	46	42
Colorado	1,797	1,427	144	196	886	888	107	71	2,683	2,314	251	267
New Mexico	510	475	68	49	244	256	24	14	754	730	92	62
Arizona	656	524	43	47	520	485	148	51	1,176	1,009	191	98
Utah	364	307	33	28	111	99	13	10	475	406	45	38
Nevada	150	131	14	15	63	56	8	8	213	186	23	23
Washington	857	735	75	71	1,589	1,179	140	123	2,446	1,914	215	194
Oregon	508	454	45	40	964	714	65	63	1,472	1,168	109	103
California	3,748	3,174	320	304	7,355	6,118	683	857	11,103	9,292	1,003	1,161
Alaska	6	5	1	1	12	10	1	1	18	15	2	2
Hawaii	73	65	7	7	440	371	34	31	513	436	41	38
United States	60,617	51,845	5,357	5,317	51,645	43,143	8,334	4,389	112,262	94,988	13,692	9,706

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period.
 2/ Estimates as of the end of current month. Rounded data may not add.

Transportation

Table 34.—Rail rates; grain and fruit-vegetable shipments

	Annual			1985				1986		
	1983	1984	1985	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Rail freight rate index 1/ (Dec 1984 = 100)										
All products	95.0	99.3	99.9	100.0	99.9	100.0	99.8 p	100.9 p	101.1 p	101.1 p
Farm products	94.0	98.7	98.9	99.5	98.9	98.9	97.6 p	99.6 p	99.6 p	99.6 p
Grain	94.0	98.6	98.1	99.3	98.0	98.0	96.3 p	98.9 p	98.9 p	98.9 p
Food products	94.8	99.1	100.1	100.0	100.1	100.1	100.1 p	101.1 p	101.1 p	100.7 p
Grain										
Rail carloadings (thou. cars) 2/	26.1	27.2	22.5	23.4	23.8	29.5	23.4	25.0	22.7	20.7
Barge shipments (mil. bu.) 3/ 4/	40.8	37.2	31.8	n.a.	39.9	47.8	26.3	31.1	21.8	n.a.
Fresh fruit & vegetable shipments										
Piggy back (thou. cwt.) 3/ 5/	545	570	600	589	485	452	506	590	534	604
Rail (thou. cwt.) 3/ 5/	786	640	513	639	362	461	590	579	566	489
Truck (thou. cwt.) 3/ 5/	7,923	8,006	8,097	7,373	7,237	7,706	7,858	7,665	7,596	8,160
Cost of operating trucks hauling produce 6/										
Owner operator (cts./per mile)	114.2	115.5	116.1	114.9	117.1	118.8	119.0	118.4	115.4	113.0
Fleet operation (cts./per mile)	112.7	115.3	116.7	115.6	118.3	119.4	119.9	118.9	116.5	113.4

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads.
3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Series discontinued in March 1986. 5/ Preliminary data for 1985 and 1986. 6/ Office of Transportation, USDA. p = preliminary.

Indicators of Farm Productivity

Table 35.—Indexes of farm production, input use and productivity

(See the April 1986 issue.)

Food Supply and Use

Table 36.—Per capita food consumption indexes (1967 = 100)

(See the Nov. 1985 issue.)

Table 37.—Per capita consumption of major food commodities (retail weight)

(See the Oct. 1985 issue.)



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